



KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS

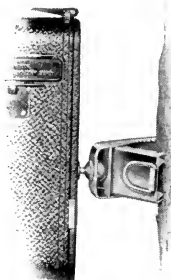


NOVEMBER 1922



CANADIAN KODAK CO., LIMITED.
TORONTO, CANADA

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THE toothed jaws fasten firmly to an axe handle, fence rail or branch, and the Kodapod is ready to render tripod service.

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So you can be in the group attach the Kodak Self-Timer to the cable release, set it, and take your place. It takes the picture for you.

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PRINTS are easily soiled and lost in desk, table or bureau. Mount them in an album and you keep them clean and *keep* them.

The Balmoral Album has a handsome, genuine crepe leather cover, attractively finished and stamped with the word "Photographs." The fifty loose leaves are held in place by a silk finished cord.

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ADVENTURERS

From a negative made with a No. O Brownie, by Mrs. J. Fremont

KODAKERY

A Journal for Amateur Photographers

PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES 5 CENTS

VOL. X

NOVEMBER, 1922

No. 1

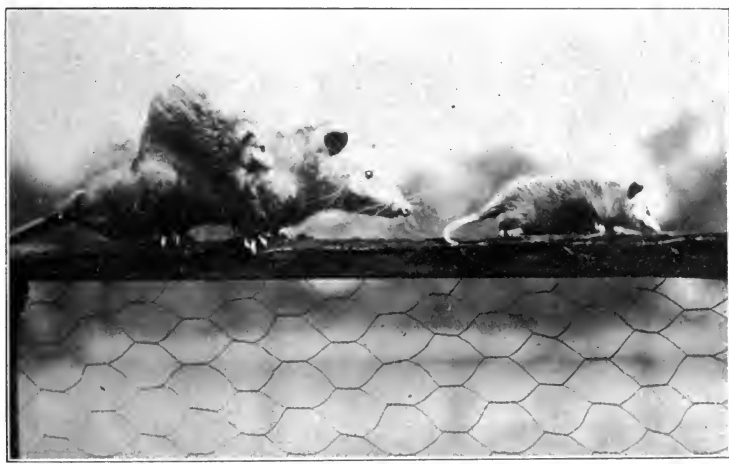


FIG. 1

POSSUM POSES

A NATURE SKETCH—BY HOWARD TAYLOR MIDDLETON

PROLOGUE

NOT so long ago I received a communication from a KODAKERY reader in which he asked this question: "Is there a mammal sufficiently docile, or slow of movement, to allow a series of photographs to be made

of him, in the wild state, by an average amateur?"

Upon first reading, I was inclined to answer in the negative. To induce a wild animal to pose, of his own free will, throughout a set of pictures, seemed quite impossible. Then I thought of Rastus



FIG. 2

Possum. (I call him "Rastus" because, in my mind, he is so inseparably associated with the negro that the name fits like a glove.) If any of my four-footed wild life friends would give sittings at the pleasure of the photographer Rastus was the chap. Then and there, I made a note of the fact that the first time I met any of Rastus' folks, a group of photographs should commemorate the incident. And just the other day the opportunity came—a greater opportunity than was anticipated.

ACT I

It was on a gray morning (Possums, while largely nocturnal, are occasionally abroad on dull days) that I chanced upon Dinah, wife of Rastus, with three "chillen a-ridin'" on her back." This happened while motoring a narrow woodland road

flanking a chicken run down on the farm. It appeared to me that the old lady's countenance held a guilty look. She certainly bore the air of having been on forbidden ground, and her rotundity suggested a pullet dinner not long past. However, she was more than welcome to the fowl if she, and her little ones, would pose for me in payment, and I told her so. Taking the low muttering sound I received in reply to be an acceptance, I grabbed her by the tail, and lifted her, babies and all, to the fence top—and then the fun began.

The little possums were all very playful and one especially of a roaming disposition. Soon after the Graflex, which in preparation for the contemplated series, had been set at $\frac{1}{110}$ - $f.4.5$, scored its first hit, the bold one started on a



FIG. 3

pilgrimage, descending from his perch, via Mother's snout, and running ahead of the procession with squeaks of sheer delight. (Fig. 1.)

A growl bade him cease his adventuring, and while he finally obeyed, it was with a great deal of arguing in favor of a continued ramble. When it came to argument, though, Mother had the situation well in hand. A growl is more effective than a squeak any day—even a baby possum knows that, (Fig. 2) and discretion overcoming valor, the reckless youngster was soon snuggled down in his "back-rest" once again.

INTERLUDE

A robe from the car was now brought into play as a carrier, and the "talent" transported to a new location.

ACT II

On the forest's edge, at the base of a giant pine, the possums were liberated and left quite to their own devices, the photographer standing by with the Graflex to snap whatever of interest might transpire. It took Dinah a few moments to realize that she was her own mistress, and that there would be no more tail-pulling. Whilst she was gaining courage to move onward toward her home in

some distant hollow tree, Fig. 3 was procured. As the light was stronger now, the lens was stopped down to *f*.8 for greater depth of focus.

In a short time the family walked off in Indian file to a nearby prostrate tree trunk, the mother pausing from time to time to enable her children to mount.

From this situation she shambled across the open to a slim dead chestnut, and climbed aloft, her babies clinging to her right valiantly.

At a height of twenty feet the arboreal wanderer took to a horizontal limb, the camera man keeping pace with her upon an adjacent

tree. (Fig. 4.) The light was bad in this case with the subjects against the clouded sun, exposure $\frac{1}{25}$ —*f*.4.5. Note the hand-like feet which adhere to a branch as tenaciously as those of a monkey.

In Fig. 5, three fuzzy babes of the wood are indulging in setting up exercises upon a wild-cherry bough, and, incidently, having the time of their young lives.

EPILOGUE ·

To those who demand positive results in wild life photography, without too great an expenditure of energy, time, and patience, I enthusiastically recommend the Possums.



FIG. 4



FIG. 5



KEEP THE LENS CLEAN

ON the cleanness of your lens depends in a marked degree the brilliancy of your picture. Exactly as the image that reaches your eye through a dirty window pane is lacking in brilliancy so the image that a dirty lens projects is similarly clouded.

If there is dust on your lens, remove it with a camel's hair brush. To clean it, breathe on it, then wipe it carefully with a clean, well worn linen handkerchief that has been made soft by many washings.

Lenses should never be cleaned with silk or wash leather, or with any stiff cloth, nor should ordinary paper of any kind be used. All these are apt to scratch the glass. If you prefer paper to a linen handkerchief be sure to obtain the kind that is made expressly for cleaning lenses. This can be obtained from dealers in optical goods.

Never clean a lens with alcohol or ammonia or with any kind of acid, and never use any polishing preparation on a lens.

REMOVING PRINTS FROM CARDBOARD MOUNTS

THE best way to remove a paste mounted print from a cardboard mount is to place it, face down, in water and leave it there until the water has penetrated through the print and softened the paste sufficiently so that the print can be slid off the mount.

This will take from a few minutes to an hour or more, depending on the composition of the paste and the surface texture and thickness of the print. Should the edges of the print separate from the mount, the best method of removing it will be to allow print and mount to float face down on

the surface of the water until the print slides off the mount.

If the edges of the print do not loosen after a two hour immersion, they probably will not loosen in several hours. The thing to do in this case is to use a penknife, not for lifting the print, but for splitting the mount. As much of the cardboard as the water has softened will readily tear off the back of the mount. After this has been removed the card should be returned to the water and sections of the cardboard removed as soon as they become soft enough. In this way the entire mount can be



A SHADOW FANTASY

Made with $3\frac{1}{4} \times 4\frac{1}{4}$ Graflex, by G. W. French

easily removed from the back of the print.

The print should never be stripped from the mount, for the danger of tearing or cracking it by the stripping method is very great. After the last layer of cardboard

has been removed, by rubbing with the finger tips while the print lies, face down, on a sheet of glass, the paste that still remains on the print can be readily washed off with a tuft of wet cotton.



"A" STANDS FOR ALBUM

MR. EDWARDS and Mr. Cooper were discussing their fishing trip of the year before.

"Let's see those prints you made, Cooper. You got a great batch of pictures as I recall them."

To comply with this request, Mr. Cooper first looked in the drawer of his desk and then the drawer of his dresser. Next he ransacked the library table and then becoming less specific in his search and more hectic in his methods, looked feverishly through envelopes and coat pockets and boxes and leaves of books.

Finally he gave it up.

"Can't find 'em, I guess," he confessed.

There was a moment's silence, and then Edwards, who was an experienced amateur, dropped these words of wisdom:

"In the real photographer's alphabet, 'A' stands for album."

And that's true.

Pictures worth the taking are worth the keeping and the only sure way to keep them out of the "Lost, Strayed or Stolen" column is to mount them in an album.

While there are various styles of albums offered to the amateur, those constructed on the loose leaf principle give the greatest satisfaction.

In the first place, it is easier to mount prints, just the way one wishes, on a detached leaf than in a bound book, and it is a great convenience to be able to remove a leaf, should it become torn or soiled, and then put another in its place. The pictures, of course, can be taken off the discarded leaf and mounted on the one that is substituted.

The loose leaf makes it possible, too, to keep pictures arranged in groups, according to subject (landscapes, portraits, etc.) without having blank leaves between the groups, for as soon as new pictures are made, the leaves on which they are mounted can be inserted in the desired places in the album. As extra leaves can be obtained for virtually all loose leaf albums the contents of these albums can be increased, reduced or rearranged whenever desired.

"A" stands for album—not "Aimless Search."



"TOM"

HOME PICTURES THAT ARE DIFFERENT

BY CARTOONIST BRADFORD

"Weary wayfarer, have you no home?"

"Yes, sir" he said, "It's wherever I roam;

Be it in forests, or be it in town—

Home's where the heart is," he said, and sat down.

THERE'S a whole sermon in the above homily. Home doesn't consist alone of four walls, a roof and a family. The little nooks and cosy places, the little details—the newel post on the stair case, the old clock that "bongs" out the passing hours, the cat, contentedly purring on the rug, these, and a hundred little things, each a little guide post to the character of the household, that make plain reading to the observer and student of human nature—these, too, are

"home" and no photographic chronicle—no album of home pictures—really is complete without them.

For instance: father's hat hanging on the rack, with its characteristic angle that father alone could achieve. To one who uses just ordinary observation, a little detail like this speaks a language as intelligible as actual speech, and will be understood by the family, and intimate friends who are familiar with the surroundings of

the home and habits of its occupants.

We move, and parting from the old house, retain many memories, like those of gone and forgotten friends, which are pleasant recollections when brought to mind; and nothing will serve this purpose as well as a photograph.

Who invariably forgets to brush the pipe ashes off the arm chair? Grandfather—and he leaves his strong old corn cob pipe there, too! Just take a Kodak picture of it—and then show it to him. Watch his face broaden into a grin. Show it to Grandmother and watch her face! “After all these years, Joseph, it does seem to me—” But there’s a twinkle in her eye, just the same.

Difficulties? There are none. If you need instantaneous exposures there are flashlight powders. Where we have no figures that move and daylight is lacking, the broad lighting effects of the Eastman Flash Sheets are ideal. By using a cloth sheet, or a large piece of white paper you can reflect light into dark places, and in every way



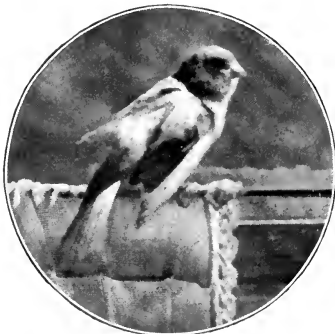
FATHER'S HAT

duplicate the light of day. Sometimes it is desirable to get light from the floor; in that case use a reflector on the floor. Just reason that light is like a resilient ball, and is going to rebound from any object it strikes. If you want a big “bounce” use a large reflector.



GRANDFATHER'S CORN COB

If you want a "spot" of light to reach some inaccessible place, use a mirror and try reflecting the light from a candle, placed just at the point where you will use the flash. Thus are photographic problems



"DICKY"

solved—by thinking out the solution of your fancied difficulties.

"Dicky" the canary will make a cute little "thumbnail" photo-sketch for our "Home" album, and if your daylight facilities are inadequate for a quick exposure, a flashlight exposure will render him on the negative in his most characteristic pose, without a bit of motion. The same is true of the pet cat. "Quick as a cat" is always a fraction of a second slower than the flash powder. My old "Tom," when flashlighted for the first time, jumped fully a foot off the floor and everybody said, "Too bad. You didn't get him!" When I proudly showed the image of the cat on the film, with that characteristic bored feline expression, they were thunderstruck.



THE HALL SENTINEL



A PORTRAIT OF THE NEWEL POST

The kitchen will prove a treasure trove of good material for interesting pictures. How about the cookie jar—with possibly a small boy surreptitiously reaching for the hidden treasures? Wait till the youngster gets the pose and expression you want and “Flash!” you have it, quicker than Jack Robinson!

Impromptu portraits of the family, made with the aid of the

Kodak Portrait Attachment will be in keeping with the theme of “Home” and are obvious enough as material for the album.

Pictures, however, with the little intimate touch like those suggested here, aren't nearly as obvious and gain in interest from this very fact.

They can be intensely popular chapters in the pictorial history of the home.

Don't neglect them.



WHEN YOUR KODAKERY SUBSCRIPTION EXPIRES

LETTERS are constantly being received from readers who are anxious not to miss a single copy of KODAKERY, asking when their subscription expires.

The expiration date is always printed on the envelope in which KODAKERY is mailed. This date is represented by a letter which indicates the month. For instance, should the letter be D it would mean that the subscription expires the fourth month (April) of the year. By observing the letter at the time KODAKERY is received you will always be reminded of the date when your subscription will expire.

Should you move from one place to another be sure to inform us promptly, giving both your old and new addresses, and also the date when your subscription expires.

Unless this is done, KODAKERY will not reach you.



IN SUNLIGHT

From a negative made with No. 2 Brownie, by Dr. W. A. Schwallie

THE

SOME
CHOICE
MOMENTS
AS
REPORTED
BY
VARIOUS
CAMERAS



Made with a Graflex, by H. Crowell Pepper



Made with a Graflex, by H. W. Maxwell

ROOM OF CHILDHOOD



Made with Vest Pocket Kodak, by
Elizabeth Long



Made with 3A Kodak, by
Linda Hummel



Made with a Premo, by Ira T. Bronson



Made with a Graflex, by M. W. Reeves



MADE BY MOONLIGHT

WINTER NIGHT PHOTOGRAPHY

BY PHIL M. RILEY

Illustrated by the Author

WINTER night photography offers many fascinations, and those who know how to secure the effects they want find that interesting pictures can as easily be obtained by moonlight or by a combination of moonlight, and electric light, as by daylight.

When the moon is full and the ground is covered with snow, pictures that represent real night scenes, and also pictures that suggest daylight scenes, can be made by merely giving the exposure that is needed for the effect desired.

A mystery and a charm pervade many scenes at night which are wholly absent in the daytime. The most prosaic subjects are often transformed by the alchemy of strong silhouetted outlines, mysterious shadows and subdued light into scenes of undeniable beauty.

Moonlight frequently hides defects and obtrusive detail which daylight reveals only too well. Even a dilapidated shed or ugly building, in an otherwise attractive landscape may, through the magic touch of night, take on just the right quality of mystery and



MADE BY MOONLIGHT

suggestion to possess real pictorial interest.

The most important difference, that everyone recognizes, between a moonlight view and a sunlight

view of a snow scene is in the tone of the sky, which is never as brightly illuminated by moonlight as by sunlight.

If we wish our moonlight pictures



MADE BY FULL MOON AND ARC LIGHT

to convey the idea of night we must secure a dark rendering of the sky. To do this we must expose only long enough for recording the lighter tones on the snow covered landscape. If we expose long enough for recording detail in the dark tones the sky will be rendered too light, with the result that the picture will look more like a photograph made in the daytime than at night.

The picture shown above represents a scene that was lighted by the full moon on the right, and by a nearby electric arc lamp on the left. The exposure given was 5 minutes with stop No. 4, which is the equivalent of stop $f.8$ on anastigmat lenses.

Five minutes proved to be an ample exposure for this subject because the greater part of the light came from the nearby arc light and the building was painted white.

The other illustrations represent scenes that were photographed solely by the light of the full moon. They received 20 minutes exposure with stop No. 4.

Subjects that are illuminated by street lights should always be pictured from a viewpoint which will prevent the lamplight from shining on the lens. Any strong light that is not reflected from the subject will fog the negative if it shines on the lens. While this fog may not ruin the picture it will lessen its brilliancy.

All of the pictures shown could have been made with a single lens camera, by using the largest stop and giving about $2\frac{1}{2}$ times as long exposures as those mentioned.

For securing daylight effects by moonlight the exposures must be not less than 4 times as long as for night effects.

When pictures are made at night the camera must be placed on a tripod, or some other rigid support. Night exposures are always time exposures, and it is impossible for anyone to hold a camera steady enough for securing sharp pictures with time exposures as short as even one second.



PORTRAIT STUDY

Made with a Graflex, by E. J. Brown



From a negative made with a Graflex, by M. W. Reeves

HOW TALL WAS ANNE?

WHEN you were a youngster your father or mother used to stand you by the window or door and, running a rule flat

across the top of your head, mark the height indicated and the date on the wall. Of course you remember it and the picture above

brings it all back. But the intervening years have produced a better method.

There's considerable sentiment connected with the moss covered bucket that hung in the well but somehow for steady diet you are willing enough to put up with the convenience and safety that the water works and modern plumbing provide. In fact, if they should introduce a moss covered bucket at your house to-night, you would probably make strenuous objection.

There may be sentiment in the way our father and mother kept a record of our height but there is little else. An Autographic Kodak provides a better method. And an

Autographic Kodak doesn't deface the wall and lasts where the wall record must fall before the tender mercies of the paper hanger.

The value of the permanency of such a record should not be overlooked. Wouldn't it be interesting now to compare the height of little Eddie at seven to that of Ed. Senior at the same age?

All through the record of childhood the ability to write important dates on the film at the time of exposure is a feature of incalculable worth.

Always the date, when making pictures of children, and once or twice a year, the answer to the question "How Tall was Anne?"



FRIENDLY GREETINGS

Made with 3A Graflex, by Julius F. Graether



THE SELF TIMER ON THE JOB

VANITY AND THE COOK

JIM always cooked for the crowd. He was proud of his culinary ability but his older brother openly scoffed and affected to believe that Jim was dishwasher, not chef, when the boys went off for the day.

Finally Jim had stood it as long as he could. He decided that a picture of himself, busy beside the camp fire at his cherished calling, was needed to convince his brother of the legitimacy of his claim. So, before the next trip, he bought a Kodapod and a Kodak Self Timer, and when the day came he took them and his Folding Brownie along.

Before dinner all the boys but Jim were off on a "Treasure Hunt." Here was Jim's opportunity. He took the Kodapod from his pocket, and, by clamping its jaws to the handle, made the camp axe, stuck

in a block of wood, do tripod duty. Screwing the Brownie on the Kodapod, and attaching the Self Timer to the cable release were matters of a moment, and then he focused the Brownie on the fire. (See illustration.)

The rest of the boys were returning—he could hear their shouts. Quickly he "cocked" the Self Timer and took his place at the fire beside the steaming kettle of potatoes, the frying pan in his hand. "Click" the released shutter sounded, and Cook Jim was transferred to film.

"Pretty good picture, eh?" he asked brother Bill a day or two later when the print came back from the finisher's.

"It's a *chef d'oeuvre*," was the reply.

And Jim caught the "chef" and was satisfied.



THE COOK (AND PHOTOGRAPHER) IN POSITION



THE PAPER

Enlarged from Graflex negative made by G. W. French



"GOOD MORNING"

From a negative made with Pocket Premo, by Alf. Erichsen

SERVICE DEPARTMENT TALKS

HOLD THE CAMERA LEVEL

IF in making pictures of a high building you find that the top of the building cannot be included in the finder, move back and work from a point far enough away so that the entire building will show in the picture, or, if possible, make the exposure from a window in a building across the way.

Do not tilt the camera upward in order to include the top of the building. If this is done the side lines of the building will converge towards the top, giving the building the appearance of being narrower at the top than at the foundation.

It should be further noticed that when working in an elevated position, the camera should not be tilted downward, because when this is done the lines will taper, showing buildings wider at the top than at the bottom.

The camera must be level.

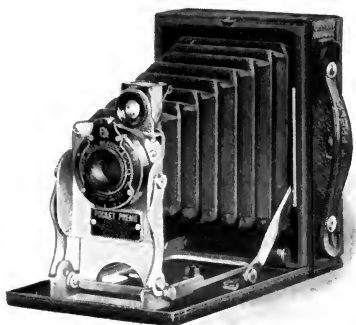


For any photographic information you
may need write the

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

Pocket Premo

\$11.00



Carries conveniently—in the pocket.

Opens quickly—a single motion extends the bed and throws the lens forward into fixed focus position.

Operates easily—locate the subject in the finder, press the release and the scene is recorded.

The picture is $2\frac{1}{4} \times 3\frac{1}{4}$ inches; the equipment includes Kodak Ball Bearing shutter and Meniscus Achromatic lens. Loads in daylight with film packs.

At Kodak Dealers'

Canadian Kodak Co., Limited

Toronto, Canada

Takes the effort out of enlarging

Kodak Auto-Focus Enlarger

WITH this compact apparatus the process of enlarging is reduced to its simplest terms. Slide the camera down and the image shrinks, up and it grows to the size you want—and *the focus stays sharp*. No bellows to rack, no further adjustments to make.

The Kodak Auto-Focus Enlarger accommodates either

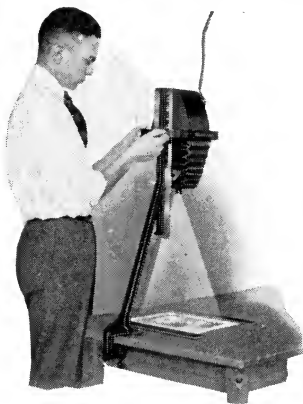


plate or film negatives up to 4 x 6 inches, and makes prints on Bromide Paper from 1½ to 3½ times the dimensions of the negative. Complete with Kodak Anastigmat Lens, negative holder, paper holder, set of flexible metal masks in six sizes and electric cord and plug, but without the 60-watt Mazda lamp required for illumination.

Kodak Auto-Focus Enlarger . . \$40.00

Diffusing Disc for soft focus effects . 1.00

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At all dealers'



From a Graflex Negative

GRAFLEX

Graflex advantages are valuable every time you take a picture, whatever the nature of the subject.

You *know* when the focus is sharp, you *see* what the view includes because a big image of the subject, right side up, is visible in the focusing hood until the very instant of exposure.

Graflex focal plane shutter, with speeds of $\frac{1}{10}$ to $\frac{1}{1000}$ of a second, and a superfine lens such as the Kodak Anastigmat *f.4.5*, are a combination that safeguards proper exposure even under difficult light conditions.

"The Graflex Baby Book"—the story of how one family kept the baby's biography—by mail on request.



Canadian Kodak Co., Limited

Toronto, Canada

Plate advantages with film convenience—

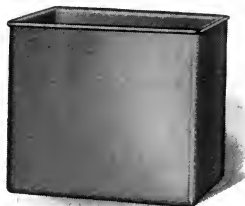
KODAK CUT FILM

COMPARED to plates, Kodak Cut Film weighs but a fraction as much, is easier to handle, unbreakable, non-halation, and produces negatives that are superior in quality.

The Kodak Cut Film Sheath adapts any plate holder for use with Kodak Cut Film, and with the Combination Back both regular and *Special* models of the Nos. 3 and 3A Kodaks can be adapted for its use.

*For prices see the 1922 Kodak Catalogue—free
from us or your dealer*

KODAK DEVELOPING BOX No. 1 provides a swift and easy means of obtaining uniform development of Kodak Cut Film by the time and temperature method.



Price \$2.50

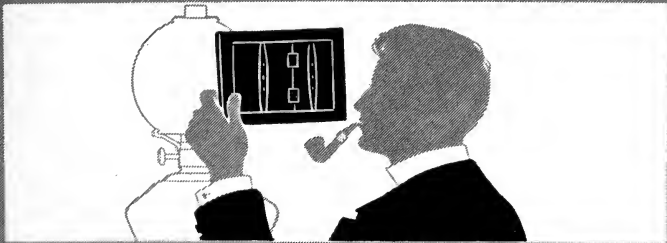
Kodak Cut Film Developing Hangers for use with Kodak Developing Box No. 1

Price, each, 25c.

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TORONTO, CANADA

At your dealer's



Prints by Gaslight

Do your vacation films justice,
print on

VELOX

The paper that makes the most
of every negative

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At all Kodak dealers'

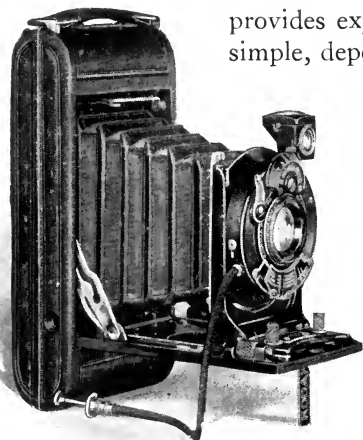
You scarcely feel it in your pocket

No. 1 Autographic Kodak *Special*

THE cardinal feature of this new Kodak is its lens and shutter, a combination which equips it for pictures ordinarily expected of large cameras only.

The lens: Kodak Anastigmat *f*.6.3 produces clean-cut, brilliant pictures, the kind you will be pleased to see and proud to show. Picture size, $2\frac{1}{4} \times 3\frac{1}{4}$ inches.

The shutter: Kodamatic shutter has seven speeds from $\frac{1}{200}$ second for quick action pictures down to $\frac{1}{2}$ second, and time and bulb actions as well. It provides exposure control that is at once simple, dependable and accurate.



With the aluminum body finished in sealskin and the metal parts in nickel or black enamel the significance of the word "Special" is apparent at first glance. The camera looks the part.

Price, \$50

At your dealer's

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



DECEMBER 1922



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA.



Kodak Auto-Focus Enlarger

*To expose, simply
turn down the
exposure lever as
the figure in the
illustration is do-
ing.*

THIS device means enlarging with the effort left out. Clamp the Enlarger to a table top, and it is ready for use. Loosen a thumb screw, slide the camera up and down and you make the image larger or smaller, while the focus, automatically controlled, stays sharp.

Kodak Auto-Focus Enlarger accommodates either film or plate negatives up to 4 x 6 inches and makes prints on Bromide Paper up to 14 x 21 inches. Complete with Kodak Anastigmat lens, negative holder, paper holder, set of flexible metal masks in six sizes and electric cord and plug; but without the 60-watt Mazda lamp required for illumination.

Kodak Auto-Focus Enlarger	\$40.00
Diffusing Disc, for soft focus effects	1.00

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your Kodak dealer's



Frontenac Amateur Calendars

*Give a personal
touch to the holi-
day remembrance*

EACH a handy 12-page calendar and an attractive mount for your favorite print. A greeting card that your friends will appreciate.

Made in two styles for vertical and horizontal pictures.

Price each, with envelope for mailing:

V.P.K.	for prints $1\frac{5}{8} \times 2\frac{1}{2}$	\$0.13
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No. 3A	for prints $3\frac{1}{4} \times 5\frac{1}{2}$17

At your dealer's

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TORONTO, CANADA



WRITING TO SANTA CLAUS

KODAKERY

A Journal for Amateur Photographers

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No. 2



THE VISION OF SANTA CLAUS

THE vision of Santa Claus is not an illusion to the child; it is a hope which is soon realized. The vision changes as the child changes, but it never wholly vanishes.

If it be true that "where there is no vision the people perish," the

visions of childhood must be of vital importance to the race.

The winter holidays, with their visions of Santa Claus, create pleasant memories which like other memories, grow dim with the passing of time. Why not perpetuate these, for the sake of our children?

Holiday pictures recall holiday memories. They tell the Christmas story concisely yet completely; and in telling this story they suggest many incidents that were associated with the times of which they speak.

The pictures "Writing to Santa Claus," "Mailing the Letter" and "Santa Claus' Answer" suggest the kinds of holiday records that children will always treasure. Pictures like these can be made with any camera.



MAILING THE LETTER

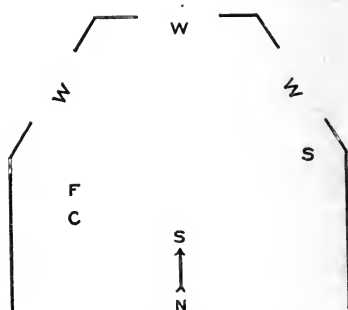


Diagram showing arrangement of room in which picture on page 2 was made

*S—Subject C—Camera
F—Flashlight W—Windows*

"Mailing the Letter" is the result of an ordinary snapshot exposure—the same exposure that is given for an average summer landscape, under sunshine.

"Writing to Santa Claus" was made at 11 A. M., when the sun was shining, by using stop $f.6.3$ on a 3A Special Kodak and giving a $\frac{1}{2}$ second exposure. This picture could have been made with the largest stop on a rectilinear lens, with a 1 second exposure, and also with the largest stop on a single lens with a 2 seconds exposure.

The diagram above shows the arrangement of the room in which it was made.

"Santa Claus' Answer" is a flashlight picture, made at night. The camera was 15 feet from the tree, the lens was stopped down to 16 and a No. 3 Eastman Flash Sheet was ignited in a Kodak Flash Sheet Holder, which was held about 5 feet above the floor, just to the left of the camera. Similar pictures can be made with single lens cameras by working according to the instructions that are furnished with Eastman Flash Sheets.

Christmas trees always photograph so dark that they should be pictured against a background that photographs white or gray. The walls of living rooms will photograph lighter than the tree unless they are red or some very dark color. When the walls are red or very dark it is best to hang a bed sheet or a blanket behind the tree, or place it in front of a window that has light colored curtains.

When a decorated Christmas tree is to be the sole object of interest in a picture the most pleasing composition will be obtained by placing it in the middle of the picture area, but when a child is to be photographed beside the tree any composition that includes what is wanted in the picture record may justly be considered the right one for the case.

In order to uniformly illuminate a Christmas tree with flashlight the flash must be made at least 10 feet from the tree, but the flash should, under no circumstances, be made closer than 3 feet to walls, ceiling, curtains, or anything that is inflammable.

As all flashlight preparations are



SANTA CLAUS' ANSWER

highly inflammable they should be kept out of the reach of children. Always read and observe all the precautions that the manufacturers of flashlight preparations recommend.

AUTOGRAPH THE DATE

PEOPLE change as they grow, and the landscape changes as vegetation grows.

We are often unable to determine when certain pictures of people

and of landscapes were taken.

All who use an Autographic Kodak, Brownie or Graflex should autograph the date on the film immediately after it has been exposed.



ON THE FARM

HOW FAR FROM STEP TO STEP?

WHEN the time comes for Mutt and Jeff to fight a duel with pistols, the extent of casualty will depend on which of the pair paces off the traditional distance between positions. Comparative safety will be enjoyed by both parties if Mutt does the measuring, but there will be fighting at close quarters if Jeff's short stride is the rule.

Paces are no more the same length than stones are the same weight. That's something to be remembered by anyone who uses a focusing camera.

The only way to be sure of sharp focus is to know how far the principal object is from the camera and to set the scale accordingly. The simplest way is to pace the distance. But if you guess at the length of your stride you might as well guess the distance in the first place.

Measure your pace. Take twenty steps, then with a tape line determine the distance covered. Divide the number of feet by twenty and you'll know the average length of your footsteps. Remember it. Then, when focusing, you can easily translate footsteps into feet, set the focusing scale correctly and be sure of sharpness in the negative.

Careful pacing is always a worthwhile precaution, but especially so when the lens aperture used is large, because depth of focus is then increased.

Growing youngsters ought to repeat the measurement of their paces each year, because an increase of a few inches amounts to a considerable error when multiplied several times. Make it a rule always to know the length of your stride and then pace the distance.



IN THE HARBOR

Enlarged from a Brownie Negative, made by Alexander Murray



"HELLO KODAK!"

Made with a 3A Kodak, by Lynda Hummel



FIG. 1—*Plume Tail and the new perfume*

NATURE CAMERA SECRETS

BY HOWARD TAYLOR MIDDLETON

THE editor had an inspiration for a wild life tale from a different angle, and kindly passed it along to the writer. This idea, as it came to me, resolved itself into three pertinent questions.

"Will you tell us?" asked the editor; "first, how you induce your subjects to grow accustomed to the sight of the camera; second, show us the sort of country in which you find birds worth photographing; third, the method you employ for concealing yourself, or your outfit, from the eyes of the various animals?"

The leading answer to the first question should prove newsy: I have, to an extent at least, overcome the camera shyness of wild animals through the medium of Kodak Leather Dressing. I stumbled upon the value of this protective fluid as a lure by sheer accident. I had been making more or less fruitless attempts at photographing a certain timid gray squirrel, in close proximity with a Kodak against the pleasing background of the snow-clad winter woods. Eventually, through rough usage as a stage setting, the little camera became soiled, and I gave



FIG. 2—Fifteen different varieties of birds were photographed here

it a coat of Kodak Leather Dressing. The very next day Plume Tail not only entered the studio at a gallop, with a smile of joyous anticipation bisecting his fuzzy countenance, but after inhaling the delicious aroma for an instant (Fig. 1.) took a taste of the Kodak as well. The tooth marks are there for the scrutiny of skeptics. You see, the dressing eliminates the man scent, which is a danger signal to all wild creatures, and gives forth in its stead a delightful fruity odor (a la banana) very pleasing to the woods folk. I will not go so far as to say that the dressing is invincible as a lure, but I have actually found that my success, when photographing animals

with a baited set camera or when inducing animals to pose in company with a camera is greater when the instrument is freshly coated with Kodak Leather Dressing.

Now for the country in which to find birds. Figure 2 shows a stretch of elder and blackberry tangle, fringing an inland pond, where I have photographed fifteen different varieties of birds, to wit: In the heart of the moist thicket, the cardinal grosbeak, catbird, chipping sparrow, cuckoo, mourning dove, red-eyed vireo, red-winged blackbird, robin, song sparrow, thrasher, wood thrush, and yellow warbler; in the vine-clad dead tree, the downy woodpecker, flicker, and starling.



FIG. 3—An ideal spot for nature pictures

In Fig. 3, we see the sort of place where the bank, barn, and tree swallows, dip and wheel above the quiet water, where the wood duck broods in a wild apple tree, where the kingfisher sounds his rattle, and, occasionally, a pair of mallards stop over to nest amid the swaying reeds of the adjacent marsh, joining company with the bittern, the marsh wren, and the white-rumped harrier. The killdeer and spotted sandpiper come here to feed, drink, and bathe—all this in the daytime. Then the shivering cry of the little screech owl quavers forth from the hollow trunk of a willow; comes the raucous squawk of a night heron followed by the flute notes of a

whip-poor-will—and it is night.

In concealing the set camera, I have usually done so with the idea of insuring the instrument against theft rather than making it invisible to the subjects to be photographed. Covering a period of many years, in which I have had my camera hidden away in forests, fields, and swamps, for days at a time, I have never suffered a single loss, and I attribute this good fortune, in large measure, to the fact that my outfit was out of sight of marauding humans as well as denizens of the wilderness. While I have seldom found it necessary to hide the camera, except as a protective feature, it is always well to be prepared, for you never can



FIG. 4—*The Camera Before Camouflaging.* (See Fig. 5)

tell whether or not your subjects will prove wary until you have made some experiments with their dispositions. For instance, one nesting robin may pay absolutely no attention to your outfit, even though it be entirely exposed, and very close to her home, while another red-breast will refuse to come near, though the camera be ever so carefully camouflaged—and this is liable to happen with other birds as well.

In Figs. 4 and 5 the Graflex is shown, first exposed, then hidden by branches. It is really the work of but a moment or two with a penknife and a bit of cord to make your outfit fade from the sight of

man, beast, and bird. Upon the occasion when illustrations 4 and 5 were made, the writer was hot upon the trail of a series of mourning dove pictures, but Black Jim, Reddy Chickaree, or that undesirable alien, the starling, ordained otherwise. I could not fasten the crime of nest plundering upon any one individual—unfortunately the evidence was all of a circumstantial nature, but this I do know: The three above mentioned ruffians were all in the neighborhood when the deed was committed; it was simply a case of who saw the two beautiful white eggs first I am sure.

When the camera is to be left out over night, or at a time when there is a possibility of storm, the



FIG. 5—*The Camera Camouflaged*

best protection is a wooden cover constructed like a bird house, but, of course, with a removable floor. A box with a sliding lid makes good material from which to build a camera cover. There should be a roof with a steep pitch to carry off the water, and the hole which admits light to the lens should be roofed over also. Finally there should be a handle fastened to the roof peak for carrying purposes. Your camera is carried to the woods inside the cover. Upon arriving at the sylvan studio the cover is inverted, floor slid back, and camera removed. Then the instrument is either set up on its tripod, or optipoded to a limb or stake, and connected with bait by

a thread, after which the cover is again put in place. The outfit is now quite weather-proof, and capable of withstanding a hard rain without injury.

If you are proficient at the art of wielding a brush, you can decorate your camera cover with futurist designs, as ships were camouflaged during the world war, making it invisible to prowlers without the trouble of protecting it with branches.

An incident, bearing a trace of humor, the telling of which seems appropriate here, took place one summer afternoon when two fishing Poles, or rather two Poles who had been fishing, passed my camouflaged camera without seeing it,



FIG. 6

only to be dumfounded a moment later at observing me squatting behind a tree trunk with a thread in my hand. Not knowing that the thread lead to the camera, they both stopped short and stared, speechless with wonder. Finally, one found his voice, and pointed a gnarled finger by way of emphasis: "Loo-ook, he feeshes on de lan'!" His companion gazed, as ordered, after which he raised his battered straw hat, indulging in conscientious scratching of tousled locks. Suddenly the solution of the problem came bounding to the surface of his mind at the call of probing fingers: "Huh, dat man he too mooch crazy I t'ink!"

Now that we have discussed bringing the game to the camera, and making the camera invisible to the game, let us end by demonstrating how the camera can be taken close to the game. It is not too difficult to get near to various

birds and animals if you but go about the matter with common sense. Figure 6 shows a brooding bluejay whom Pal and I stalked with little trouble, only being careful to make every movement of our bodies smooth and easy, avoiding all abrupt or jerky motions. By doing this, I was able to erect a stepladder at the side of the nest and photograph the bird from its top, while Pal placed her hand upon the nest. An instant after the photograph was taken, she caressed the bird with gently stroking fingers. A similar occurrence took place when we met Mrs. Big-Eyes, the timber doodle. (See October KODAKERY.)

Applying the same methods to a youthful cottontail, we were able to take a picture of him,



FIG. 7

amid the color-protective grass, at point-blank range, then scratch his back, and, finally, take him in hand for a still more intimate portrait. (Fig. 7.)

Now that Jack Frost is working in his studio 'neath the Winter moon, we are reminded of the wonders of winter wild life trails—may we hit them together!



FINGER MARKS ON NEGATIVES

ORDINARY dirt can be removed from a negative by placing it in water for 15 minutes and then gently mopping it with a tuft of wet cotton. Finger marks, however, usually contain both dirt and oil, and since oil and water will not blend, water will not remove finger marks. Unless the finger marks have been allowed to remain on the negative long enough for the oil to penetrate the gela-

tine they can be removed by gently rubbing the negative with a tuft of cotton that has been moistened with gasoline or benzine.

Since dirt and finger marks on a negative nearly always show in the print, both sides of negatives should be kept clean. The way to insure this is to handle negatives only by their edges, and to store them where dust and dirt cannot reach them.



Made with a 3A Kodak, by Mrs. C. J. Gardner

VARIOUS EXPR

FROM PICTURES MADE WITH
KODAK, PREMO,
BROWNIE AND GRAFLEX



Made with a No. 12 Premo, by C. N. Wolever



Made with 2A Brownie, by
H. L. Krebs



Made with 3A Kodak, by
Edgar S. Smith



Made with a Graflex, by R. B. M. Taylor

IONS OF "HOME"



Made with a Graflex, by M. W. Reeves

Made with
No. 1 Kodak
Special, by
Leopold Zwarg



Made with No. 12 Premo, by Stephen J. Bushya



Made with No. 1 Kodak
Special, by Leopold Zwarg



GOOD MORNING (REEL 1.)

"IN FOUR REELS"

Do you remember that old hair restorer ad—"Going—going—gone"? It showed three pictures—first a man's head with two spears of hair, then with one and then "gone."

A fair assumption was that anyone desiring a similar fate had only to buy a bottle or so of the liquid.

But these pictures, from the fact that they were in series had an appeal that a single illustration could never produce, and if we needed further examples we have only to remember the youngsters' delight at the colored Sunday supplement, and the legion of people who buy certain newspapers simply because they feature the comic strips of Briggs or Sidney Smith or Bud Fisher.

There seems to be an interest in pictures in cycle that a single draw-

ing does not as a rule possess and perhaps the appeal of the newspaper strip has significance for the amateur photographer.

Series pictures with your Kodak—there are possibilities there that no camera can ever exhaust. Not comic pictures—the camera is not the proper vehicle for slapstick—but story-telling prints, with a tinge of humor, perhaps, that carry one through an interesting incident chapter for chapter.

Many a time we've watched little Nancy putting her favorite doll to bed and constant practice has made the ceremony a real ritual. Why not put the story in pictures somewhat along these lines—(1) Making the bed, (2) Putting on dolly's "nightie", (3) Tucking her in, (4) The good-night kiss. There



DOLLY'S BATH (REEL 2.)

you have it in telegraphic form. Or take the dolly series that illustrates

this article—there is no end to the variations.



DRESSING DOLLY (REEL 3.)



BREAKFAST TIME (REEL 4.)

Pictures like this give just a hint of the movies and this might be suggested in the titles in your album. The accompanying photographic episode, for example, might be titled, "The Little Mother—a Kodak production in 4 reels."

The list of possible productions is unending.

There's Uncle Ed's nightly performance. (1) Putting on the soft slippers, (2) Outstretched on the divan, pipe in mouth, (3) Hidden behind the pages of the newspaper.

There's Tabby Cat at the milk saucer. (1) Cook pouring out the milk, (2) Tabby taking copious draughts, (3) The empty saucer and (4) Tabby asleep in the sun. Or there's Bill and Frank changing a tire. (1) The flat tire with Bill and Frank registering extreme annoyance, (2) Pulling off the spare, (3) Letting down the jack, (4) Off again.

These are only simple little suggestions but they may start a train of thought in your mind that will give the picture idea that you would like to put in series—and you'll find it great fun. Into the bargain you will find that the little people and big people alike enjoy taking part in a game that has a story purpose. Who does not think he or she could act a little?

Plan your story first—we almost said, "Write your scenario." Then, to use the expression made famous by the motion picture directors—"Shoot".



Should you change your address be sure to notify us at once, giving both your old and new addresses, and the date your subscription expires.

A THREE REEL
THRILLER



*Made with a
No. 1 Kodak Jr.
by
Mortimer Ostenveis*



Not a Ghost Picture—Only Billy's time exposure with the camera held in the hands

ON THE LIBRARY TABLE

A ONE ACT PLAY

Scene—The living room of a Canadian Home.

Time—A few days ago.

(As the curtain goes up Kodak and Brownie are standing in the

centre of the library table discussing the pictures on the page of the open album that lies between them.)

KODAK: Cousin Brownie, you certainly are a versatile fellow.



Billy's time exposure made with a Tripod

BROWNIE: Now what? I always know I'm going to be scolded when you start talking that way.

KODAK: I'm merely asking for information. (*Emphatically*) What in the name of heaven is that? (*Pointing to the blurred print in the album*) Have you been getting chummy with Conan Doyle?

BROWNIE: It does look like a spook, doesn't it? It's a picture of Billy's sister.

KODAK: (*With sarcasm*) Thanks for telling me.

BROWNIE: (*Hurriedly*) You see, the last terribly dark, cloudy day we had, Billy tried to make a time exposure holding me in his

hands. You know it can't be done. (*Proudly*) But just look at this one. (*Pointing to the sharp picture in the album*).

KODAK: Well now—that is Billy's sister. It's a good picture too.

BROWNIE: (*Explaining*) Billy's dad—your boss—came out of the house and saw Billy making the first picture. But it was too late to stop him. He told him to make another by placing me on the tripod so I'd rest firmly. He did. Then Bill's dad dropped a hint about reading the manual.

In there it says that the camera should NEVER be held in the hands while making a time exposure. Use a tripod or a table or any surface that will hold the camera immovable. Just the slightest move will blur the picture.

KODAK: That's right. Folks can't expect us to be good clear story tellers if they try to make time exposures holding us in their hands.

BROWNIE: Not unless they want us to be spook story tellers.

(CURTAIN)



CALENDARS

Every amateur photographer who uses a 3A or smaller camera can easily and economically make holiday gifts which, being the handiwork of the donor, will have a value that no purchased gifts can possess.

The intrinsic value of a calendar is small, but the sentimental value of a Kodak Amateur Calendar, mounted with a picture made by the one who presents that calendar to a friend as a Christmas or New Year's greeting, is very great.

As the calendars are of the two-piece or mask style, the actual mounting of prints is a simple

matter. The pictures are securely tacked with paste or dry mounting tissue on to the baseboard of the calendar under the flap which makes an attractive frame for the print.

These calendars are being supplied by Kodak dealers in two styles, for vertical and horizontal pictures, and in four sizes: No. V. P. K., for pictures $1\frac{5}{8} \times 2\frac{1}{2}$; No. 1, for pictures $2\frac{1}{4} \times 3\frac{1}{4}$; No. 1A, for pictures $2\frac{1}{2} \times 4\frac{1}{4}$ and No. 3A, for pictures $3\frac{1}{4} \times 5\frac{1}{2}$.

Each calendar is enclosed in a stout envelope container suitable for mailing.



THE MENDING HOUR

Enlarged from Negative made with a No. 9 Premo, by F. W. Beckett

KODAK CUT FILM FOR USE IN PLATE
HOLDERS

EVER since photographic emulsions were first coated on glass the demand has existed for some material on which negatives could be made that would offer every plate advantage and yet be free from the objections that attend the use of this material.

These objections are: liability to breakage, relatively great weight and the halation that results whenever an exposure ample enough for recording shadow detail is given. This halation is largely caused by rays of light passing through the emulsion and the glass, and being reflected back into the emulsion, at an angle, from the back surface of the glass. Halation destroys detail and, in some cases, wholly obliterates parts of the outlines of objects that should be clearly defined.

The material that overcomes all of these objections is film. The weight of a given size of film negative is but a small fraction of the weight of the same size of glass negative. Film negatives are unbreakable and they are practically free from halation.

It is because of these facts that the majority of photographers are making film negatives exclusively. Kodak Roll Film, Graflex Roll Film and Film Pack Film have long been used in the various models of hand cameras for which they are intended, but it is only recently that cut film has been supplied in small sizes for use in plate holders.

While Kodak Cut Film is thicker

than either roll film or film pack film it is nevertheless much thinner, and vastly lighter, than glass.

It is made for $2\frac{1}{4} \times 3\frac{1}{4}$, $3\frac{1}{4} \times 4\frac{1}{4}$, $3\frac{1}{4} \times 5\frac{1}{2}$, 4×5 and 5×7 plate holders. When Kodak Cut Films are used in plate holders they are placed in Kodak Cut Film Sheaths. These sheaths, when used in plate holders, bring the film in same register as a plate. If the septum in plate holder has a spring this must be flattened or removed to prevent it forcing sheath and film out of register.

Kodak Cut Films are made in two speeds—regular and Super Speed. Regular Kodak Cut Film should be given the same exposure as Kodak Roll Film. The Super Speed film requires considerably less exposure than regular.

The regular is recommended for all photographic work that has heretofore been done with fast dry plates.

The Super Speed is recommended for making indoor portraits, photographing interiors, picturing rapidly moving objects and for all other work which can only be done with an extremely fast emulsion.

Kodak Cut Film can be used in the Nos. 3 and 3A Kodaks (both regular and special models) when these are fitted with the Combination Back, in all Premo plate cameras, in all but the Nos. 1A and 3A models of the Graflex and in all other makes of cameras that use plate holders.

DEVELOPING KODAK CUT FILM

KODAK Cut Film, like all other film, can be developed either in a tray or in a tank.

In a tray the films can be developed either singly or in batches. If developed singly a tray that is just large enough for one film may be used, but if more than one is developed at a time the films should be placed in two piles, in a tray that is large enough for keeping the piles well separated.

When three or more films are developed together they must be handled in the tray, and enough developer must be used for keeping the films fully covered. Unless this is done uneven development will result. The solution in the tray should be not less than half an inch deep.

After the first film is slid under (not dropped on and pressed under) the developing solution it must be allowed to absorb developer for about half a minute and then be moved to one end of the tray. The next film is likewise to be slid under the developer and, after about half a minute, placed on top of the first one.

This method of immersing films in the tray and, after the emulsion of each has become saturated with developer, placing it on top of the last film that was added to the pile, is continued until all the films that are to be developed at the same time are in the tray. Not more than six should be developed at once because they must be constantly moved. one at a

time, from one end of the tray to the other, and each negative must be examined, from time to time, before the dark room lamp in order to determine when to stop development.

It is impractical to give the necessary attention to more than six films while development is proceeding.

A quicker, cheaper, and more satisfactory method of developing Kodak Cut Films is afforded by the Kodak Developing Box. This is a combined developing, fixing and washing tank. It is constructed of a special metal which is not readily affected by the chemicals of which developers and fixing baths are regularly compounded.

In this developing box twelve, or less, films can be developed at the same time. The box is an open tank and each film is held, suspended in the developer, by a Kodak Cut Film Developing Hanger.

The films can be developed by the time and temperature method (the basis of all tank development) or can be developed by the old method of lifting a negative out of the developer and determining when to stop development by the appearance of the image as it is viewed before the dark room lamp.

The Kodak Developing Box therefore offers the advantages of tank development, combined with the pleasure that some workers still seem to find in tray development.

SERVICE DEPARTMENT TALKS

SAFETY IN FIXING NEGATIVES

A NEGATIVE not sufficiently fixed may look all right when removed from the hypo bath, but if the silver is not thoroughly fixed out spots will appear later—first a creamy or yellowish color, then turning to brown.

These stains when they once appear cannot be satisfactorily removed so it is important that they should not occur.

Do not take the films from the fixing bath as soon as the yellow color disappears but leave them in another five or ten minutes, or even longer, provided, of course, that the bath is the right temperature.

Then wash the films thoroughly.

If the fixing bath is exhausted and works slowly, make up a fresh one. Fifteen minutes should be sufficient to clear the negatives: then add five or ten minutes for safety.

We would like to see some of your negatives and prints. There are different ways of doing the same things and always a best way. The Service Department will gladly help you with any of your problems.



Address

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

What Real Tests Tell

KODAK FILM is under frequent drastic tests in our laboratories in comparison with all other makes of film.

These tests prove that it is unequalled in speed; that no other film provides so wide a latitude for error in exposure or keeps so well under trying conditions.

Kodak Film—the Dependable Film in the Yellow Box.

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



Premo No. 12

*Kodamatic
shutter and
Kodak
Anastigmat
lens f.6.3*

COMBINED in this pocket camera are special features that help make superior pictures:

Kodamatic shutter has speeds of $\frac{1}{2}$ to $\frac{1}{200}$ of a second, Kodak Anastigmat lens *f.6.3* works fast and cuts sharp.

Focusing is done with scale and finder or with the hinged ground glass. Film pack adapter and plate holder are included in regular equipment.

Premo No. 12 makes $2\frac{1}{4} \times 3\frac{1}{4}$ pictures. Equipped with Kodamatic shutter and Kodak Anastigmat lens *f.6.3* its price is \$53.00.

At Kodak dealers'

Canadian Kodak Co., Limited

Toronto, Canada



AUTO GRAFLEX JUNIOR

THIS little camera thrives on difficult tasks and makes easy ones still easier. For in it are combined all the Graflex features; yet its greatest dimension is five inches and it weighs under two and a half pounds.

Like its larger brothers this Graflex has the focal plane shutter (speeds $\frac{1}{10}$ to $\frac{1}{1000}$ of a second) and the reflecting mirror. Thus it offers a speed for any occasion and the assurance of sharp focus and good arrangement.

Auto Graflex Junior makes $2\frac{1}{4} \times 3\frac{1}{4}$ negatives, well defined, by fast lenses. Equipped with Kodak Anastigmat *f*.4.5 the price of this convenient little camera is \$85.

Graflex catalogue by mail or at Kodak dealers'

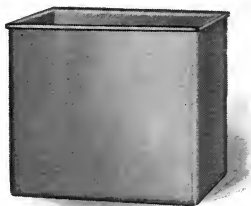
Canadian Kodak Co., Limited
Toronto, Canada

Kodak Cut Film

GIVES you all the advantages of plates with none of their drawbacks and yields you superior negatives free from halation.

With the Kodak Cut Film Sheath any plate holder can be adapted for use with Kodak Cut Film. Thus its advantages may be secured for all plate cameras of amateur size and, with the addition of the Combination Back, for both regular and *Special* models of the Nos. 3 and 3A Kodaks.

Kodak Developing Box No. 1

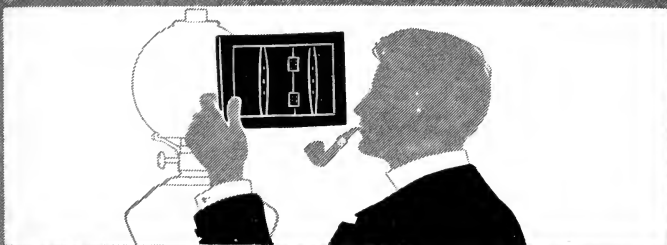


PROVIDES a quick, easy and sure means of obtaining uniform development of Kodak Cut Film by the time and temperature method. *Price, \$2.50.*

Kodak Cut Film Developing Hangers for use with
Kodak Developing Box No. 1. *Price each, 25c.*

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At your dealer's



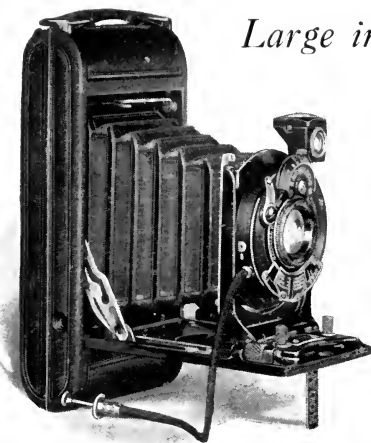
Prints by Gaslight

Your negatives
deserve

VELOX

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At your dealer's



Large in scope—small in size

No. 1
Autographic
Kodak *Special*

Pictures
2¼ x 3¼ inches

KODAMATIC shutter with an exceptionally comprehensive range—seven speeds from ½ to 1/200 second and time and bulb actions—fits this *Special* for virtually every picture in the amateur class.

Kodak Anastigmat *f*.6.3 gives each print the clean-cut sharpness that distinguishes results with this Eastman-planned, Eastman-perfected lens.

Yet the camera is so small you can cover it with your hand.

Price, \$50.00

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At your dealer's

KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



JANUARY 1923

5¢

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA.

Mount your Kodak prints in a

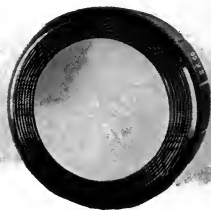


Kingsway Album

THE prints you want to show your friends are too precious to lose or soil. Keep them and keep them clean in a Kingsway Album.

*Prices, \$2.75 and \$3.75
Other Styles, from 35c. up*

Kodak Portrait Attachment



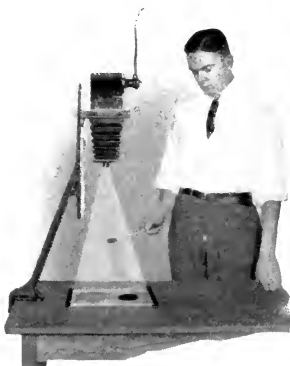
SLIP it over your camera lens and you can make "close-ups" in sharp focus—head and shoulder portraits of the children, for example.

Price, \$0.75

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

All dealers'

LOCAL control of exposure to aid in the recording of delicate detail, to prevent over-printing of shadows, to increase or decrease the contrast between tones, is greatly facilitated with this new apparatus—it takes the effort out of enlarging.



Kodak Auto-Focus Enlarger

CLAMPS to any table top, attaches to any electric light socket. Slide the camera up and the image grows, down and it shrinks, *but the automatic mechanism constantly keeps the focus critically sharp.*

The Kodak Auto-Focus Enlarger accommodates either plate or film negatives up to 4 x 6 inches, and makes prints on Bromide Paper from 1½ to 3½ times the dimensions of the negative. Complete with Kodak Anastigmat Lens, negative holder, paper holder, set of flexible metal masks in six sizes and electric cord and plug, but without the 60-watt Mazda lamp required for illumination.

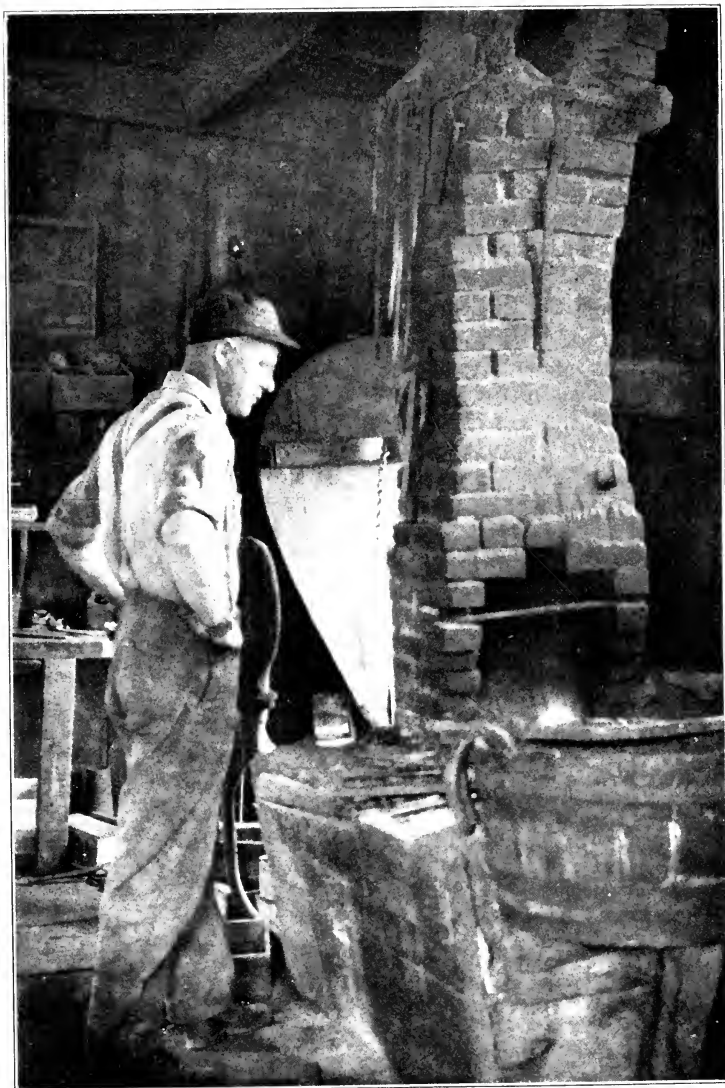
Kodak Auto-Focus Enlarger . . \$40.00

Diffusing Disc for soft focus effects . 1.00

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At your Kodak dealer's



THE FORGE

Enlargement from Vest Pocket Kodak negative, made by Walter P. Daniels



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES 5 CENTS

VOL. X

JANUARY, 1923

No. 3



WE TWO

INDOOR SILHOUETTES

BY CARTOONIST BRADFORD

Illustrated by the Author

ALMOST all of us, at some time or other, have had the inclination to enjoy the fascinating pastime of making silhouettes. Perhaps we have even run the gamut from photographing against a sheet to photographing a

shadow thrown on the wall; but then—ha, ho, hum, too many of us have rested on our laurels.

And yet, silhouette pictures present endless possibilities and are a welcome novelty.

The room in which I was



THE SMOKER

doing some photographic work was equipped with an electric arc lamp that had a large reflector. This gave me an idea. The wall was a

white one, and, turning the arc light squarely against the wall, I found I had a white background of dazzling brilliancy. Now, I figured,

if I could keep the lens side of my subject dark, and expose just long enough for recording the background, the subject would be so much under-exposed as to make a silhouette.

I placed an ordinary kitchen table between the back of the reflector of the arc lamp and the camera and darkened all of the room as much as possible, excepting the wall on which the arc light shone. Then I focused the camera on the table, rigged up a long hose and bulb, to reach under the table, arranged the costume, fish rod and landing net, lighted a pipe and, just as I puffed out a cloud of smoke, stepped on the bulb. The shutter snapped at $\frac{1}{25}$ of a second, the lens being at largest opening, *f*.4.5, and I secured the result shown in "Fishing."

Observe this closely. To all intents, it represents a man fishing outdoors from the end of a dock. Had I drawn trees and a water



PROFILE

line on the wall the wisest camera sharks would have been at a loss to tell how this was made.

In "The Smoker" the lamp was turned to throw the highlight partly toward the subject.

The silhouette "Reading" was made as follows: A white sheet was tacked, so it would be free from wrinkles, on the wall. It was illuminated by two 75 watt nitrogen electric lamps. A large square of white cardboard was placed back of each lamp to reflect the light to the sheet and, at the same time, keep it from shining in the lens. The subject was placed about five feet back of the lamps. An exposure of 5 seconds, with stop *f*.8, was given, but as the negative was under-developed it was intensified, in order to secure the necessary contrast. Observe the candle flame. Here's our old friend again, "double exposure" stunt. After the first exposure the subject steps aside, the lights are turned off, the candle lighted, the



READING



FISHING—SILHOUETTE PRINTED FROM A NEGATIVE

lens opened and a second exposure of anywhere from 5 to 10 seconds given. The longer exposure gives more of a halo around the flame.

Now as most amateurs have but small chances of access to an indoor arc light, in order to make this scheme available to all it is necessary to find some method of

duplicating the performance by daylight methods. To him who woos Kodak results "all meat is flesh," and if we want a result badly enough to think out the solution we generally get it. Remember that, and your camera problems will vanish like mist before the rising sun.



FISHING--SILHOUETTE PRINTED FROM A POSITIVE

The theory is this: It all depends on a white background that is much more strongly lighted than the lens side of the subject. That's the whole secret.

To secure this by daylight I tacked white paper on one side of an old screen door, and, placing this outside and a few feet from

an open window, with the top of the door leaning backward so that sky light would shine on it, I found that the daylight it reflected approximated the electric lighted wall, though it was, of course, weaker and the window opening made a smaller background than the wall. By darkening the room I

had ideal conditions for my purpose.

An expensive or large camera is not needed; any camera will do. The silhouette "A Profile" was made with a Vest Pocket Kodak, with the lens stopped down to *f.11*. The exposure was $\frac{1}{2}$ second by the light that came through the window.

Notice the interesting white silhouette of "Fishing," made by printing from a positive instead of from a negative. To make a positive, place a negative in a printing frame in contact with an Eastman Process Film. This film is capable of giving great contrast—just what is needed in silhouette work. The Process Film is much faster than Velox paper and, consequently, requires a shorter exposure. Try giving an "off-and-on" with a 25 watt electric lamp at, say, a distance of

five feet. One or two trials will set you on the right road. The contrast developer that is recommended on the instruction sheet that comes with the film is ideal for contrasty results.

All silhouette negatives can be developed in the tank, but as great contrast is needed for making silhouettes the development should be 30 instead of 20 minutes when the developer is at a temperature of 65 degrees Fahrenheit.

The prints must be made on a contrasty grade of paper. Contrast Velox is just what is needed as we want all the contrast we can get in our prints.

There is much virgin territory in the land of silhouette making and I have only indicated, in a small way, its possibilities. With a Kodak as your compass your exploring trip should be well worth while.



AN OUTDOOR FAMILY

Made with a 3A Autographic Kodak Jr.



NUMBER ONE

SNOW WING O' THE MARSHES

BY HOWARD TAYLOR MIDDLETON

Illustrated with Graflex Pictures by the Author

FOR the benefit of KODAKERY readers who may not be conversant with the interesting history of the White Egret, and, therefore, may not realize the distinguished place he held, not so long ago, in the marts of fashion, I will explain that he is the elegant snowy heron from whose back the "aigrette" plumes of commerce were taken to adorn the hat of Milady before protection came almost, if not quite, too late. There are forty-one handsome inches of Snow Wing; his coat is milky white, and he is yellow-billed and black-legged. Once up-

on a time this beautiful marsh dweller bred in large colonies in Southern New Jersey, not far from the home of the writer, but now it is a rare sight, indeed, to see even a solitary individual. Only in isolated bogs in the very heart of the pine barrens can egrets still be found in numbers as far north as New Jersey, where they come to rest for a time, during August and September, at the northern extremity of their migration.

Bird authorities, writing of the egret before the days of its protection, described it as being so wild that it was impossible to get



NUMBER TWO

within gun range except in nesting season when the protective instinct toward the young held the old birds close to their homes, despite the proximity of their deadliest enemy, the heartless market hunter. Unfortunately for the birds the magnificent aigrette, a train of long feathers, springing from the back and extending for a foot beyond the tail, is worn only in nesting time; hence, the near extinction of Snow Wing.

For several years the National Association of Audubon Societies have been guarding the breeding colonies of the egret wherever found. They extend from North Carolina to the Florida Keys, but

there is great doubt whether the species can be saved.

It was on a sunny morning in midsummer, (August 5, 1922) while out upon the Rancocas marshes camera-hunting, that I beheld a great white bird winging his stately way high above the swaying reeds, and, as I watched him through my glasses, he set his splendid pinions and "planed" down to the brink of a ditch where he made an awkward landing. Snow Wing, the egret, had arrived for his fishing. From that day to this, (August 20th) I am told, he has done a bit of angling in his favorite ditch almost every morn.

Several days elapsed before I



NUMBER THREE

was again able to be out upon the marshes with Snow Wing. I had slight hopes of getting pictures, knowing full well the white stranger's reputation for wildness, but I firmly resolved to make a try at the game, nevertheless.

As a herd of Holsteins were grazing near the bird, I waited to see whether or not the egret and the bovine aggregation would fraternize,—and I had a mighty good reason for this: If the egret did not fly at the approach of the animals, it meant that I could probably utilize one of them as a shield in an attempt to get close to my quarry. I noted with joy that the feeding herd was gradually

drawing near to the feathered fisherman, and that while the egret gazed at the cattle, from time to time, with head flung high, he showed every symptom of sticking to his ditch, come what may. This was my cue to begin a stalk. Wading to the side of an amiable looking Bossy, peacefully chewing her cud in the coolness of the ditch, I gently urged her toward the egret, being careful all the while to keep her ample bulk between myself and my splendid prospective subject.

Just as Bossy and I came within camera range, the lord of the herd started to cross the ditch well-nigh in the path of the bird. Did



NUMBER FOUR

Snow Wing give way? Indeed no! Not one inch did he retreat, though the waves from the wake of Sir Bull beat against his legs throughout the passage. Then it was that the opportunity for a super-picture arrived, and, standing out from behind my cow-shield, I released the Graflex shutter. (No. 1.) Exposure, $\frac{1}{25}$ sec., *f*.11.

To my surprise and delight even now Snow Wing refused to fly, but instead, picked a dainty and leisurely way through the shallows up among the splatterdocks in a quest for grasshoppers, presenting me with No. 2, exposure, $\frac{1}{100}$ sec., *f*.8.

Anxious for a flight picture, the shutter was speeded up to $\frac{1}{40}$ second, and the aperture opened to *f*.5.6. Nearer and nearer I approached, and still the big bird

ignored me. Out again upon the mud bank he walked, where I procured a third shot, (No. 3) and it was only when his image grew huge in the mirror of the Graflex, that he "took off" for a short flight down the ditch. At the first disturbance of the white wings, I released the shutter, catching my subject as his toes left the mud. (No. 4.)

Seeing him come to water near the ditch mouth, I started another stalk, wading down the little stream with great caution, crouching in the shelter of the reeds whenever possible to do so. Again Snow Wing permitted me to draw very near before taking to the air for a brief journey. When his trailing legs had cleared the ditch, I made an exposure, the result suggesting a design upon a Japanese screen. (No. 5.)



NUMBER FIVE

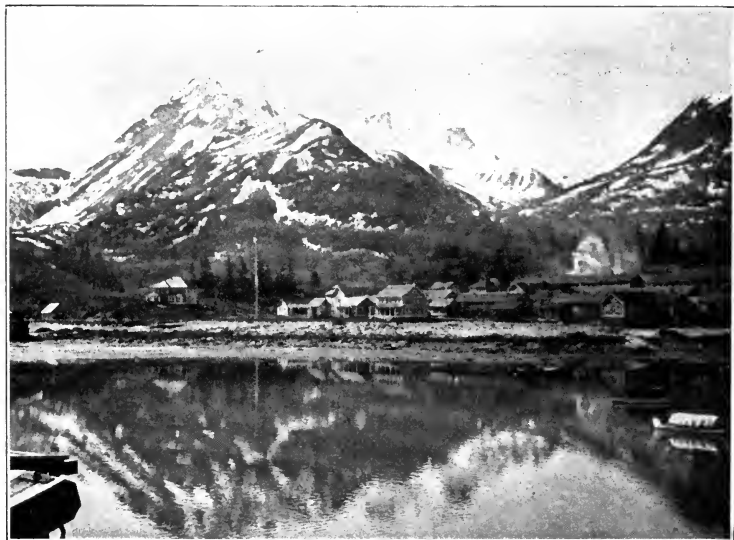


NUMBER SIX

The light breeze which had been blowing all morning suddenly subsided into a dead calm, the surface of the ditch took on the placidity of a mirror, and silhouetted against the glassy surface I beheld; not one, but two, images of Snow Wing—the bird and his reflection. Could I catch this scene with the Graflex? Moving with infinite care, for the last time I stalked Snow Wing while he searched for minnows unafraid. Of course, every time he speared a tiny fish with rapier beak, the reflection effect was destroyed for a moment by ripples, but as I closed in, slow step by slow step, my eyes

watched for the moment, and when at last it came, the picture shown in No. 6 was taken.

Now that my engagement with Snow Wing is at an end, I can but recall, with wonder, the truly remarkable tameness of the "wild" subject. I really attribute this to the fact that the bird gradually grew accustomed to moving objects through his daily association with the Holstein herd, so that when the photographer arrived, also garbed in black and white, (black trousers in wading boots and white shirt) in the golden eyes of Snow Wing, he was simply one of the cattle.



AN ALASKAN LAKE

Made with a No. 0 Graphic, $\frac{1}{110}$ sec., f.8, by R. Deichmann



PRINCESS ILIANA OF ROUMANIA
Made with a Graflex. by Merte La Voy

COUNTRY DAYS

CAMERA MEMORIES
OF
SUMMER



Made with a 2A Brownie, by
W. R. French



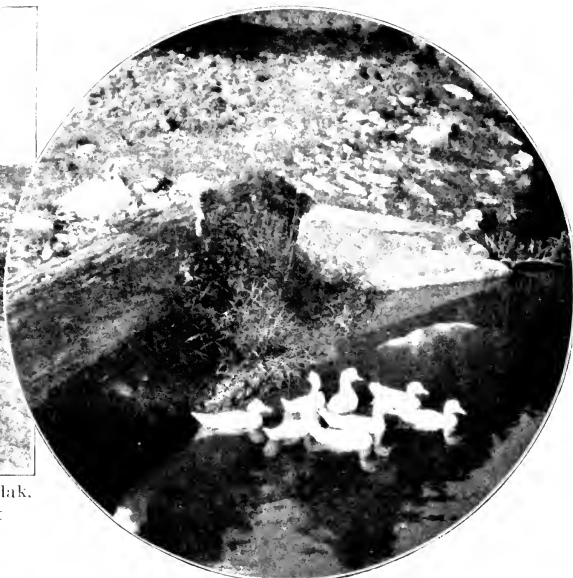
Made with a Graflex Jr., by J. H. Saunders



Made with a Vest Pocket Kodak, by N. D. Harkness



Made with a No. 1 Special Kodak,
by Mrs. Edna M. Follett



Made with a No. 12 Premo, by C. N. Wolever



Made with a Graflex Jr., by J. H. Saunders

THE GRAFLEX IN THE MOVIES

NEW uses for which the Graflex is especially fitted are constantly being found. Long supreme for picturing rapid motion it is now gaining distinction in the motion picture field, where it makes the "stills."

Stills are not made with motion picture cameras. As their name denotes, they are pictures that do not move, as motion pictures do. They are photographs of characters or scenes that appear in the motion picture.

These pictures are particularly important because it is around them that the advertising is planned. From them the posters used in front of the theatre are made. Consequently they must be right in every particular.

The ordinary method of making stills, which the Graflex is superseding, is by posing the characters and the scenes after the movie camera has filmed them. This procedure, however, consumes time, and time is precious when a constellation of movie stars is at work. Another difficulty that is encountered by this method, is keeping the characters from looking "posed."

The new way is to make the stills with a Graflex while the action is being filmed with the movie camera. Its advantages are numerous. The characters are in the spirit of their parts, and are in action, so that they appear more natural than when called on to take a certain position and pose and hold them. It is because the actors are moving, and very fast

lens and shutter work is needed to arrest the motion and get sharp pictures, that the Graflex is being used.

Since the Graflex works without interrupting the motion picture cameras, so that the action is never delayed, there is a considerable saving of time. Characters and settings are not kept "after hours" for making the stills.

In using the Graflex for stills the photographer simply watches the image on the ground glass and, when he sees what he wants, a pressure of the shutter lever makes the exposure.

The stills for Douglas Fairbanks' production of "Robin Hood" are said by critics to be "the most meritorious photographs ever taken in connection with a film play"—tribute indeed to the Graflex—the camera that made them.



THE MODEL YACHT
Made with a No. 1 Kodak Jr.

TRANSFORMING "RECORDS" INTO PICTURES

PHOTOGRAPHERS who pay as much attention to the lighting of their subjects as to the composition of their pictures realize that the lighting effects they wish to secure in their outdoor work cannot always be found in the subjects. Objects in the foreground or middle distance may be too light or too dark in tone, and at no hour, of either a sunny or a cloudy day, do they show the tone values that the photographer wishes to record.

To those who are more interested in picture records than in the pictorial values of tones, too light or too dark an area in a picture is of little consequence, but to the pictorial worker it is an important matter.

Fortunately, all photographers, whether they are beginners or advanced workers, can greatly modify some of the tones of a picture while an enlargement is being made from the negative, provided it is made with an enlarging equipment that projects the image to a table top, a shelf or an easel, so that the printing can be locally controlled.

By locally controlling the printing it is often possible to transform what would otherwise be a mere "record," in which no emphasis is placed on the chief point of interest, into a picture that has but one centre of greatest interest, to which all else in the picture is secondary.

The method by which printing is locally controlled in enlarging, consists of nothing more than

preventing the light from printing some parts of the picture while other parts are being printed. It can be employed in making enlargements from landscape, portrait, story-telling and all other kinds of negatives.

The negative from which our illustrations were made was selected because more local control in printing was necessary, in order to get the results desired, than is needed when working from landscape negatives.

The picture on page 20, which was printed for 40 seconds, with the Kodak Auto-Focus Enlarger, represents a straight enlargement, that is, it is an enlargement, every part of which was printed for the same length of time, so that it shows the values of all the tones that the negative contains.

The objection to this picture is that the face of the child is rendered too dark, while the foreground and parts of the background are too light.

In the picture on page 21 these objections were overcome, by first printing the face in a lighter tone and then printing the background and the foreground darker. The entire picture was printed for 20 seconds, and then all but the face was printed for another 20 seconds. During this second printing the face was shaded with a piece of black paper that was somewhat smaller than the image of the face. The piece of paper was pasted to a strip of glass $\frac{1}{2}$ inch wide and 10 inches long. This was held a few inches above the enlargement, and



*A "Straight" Enlargement, made from part of a 3¼ x 4¼
Kodak Cut Film Negative*



Result obtained by Locally Controlling the Printing. Made from same negative as picture on opposite page

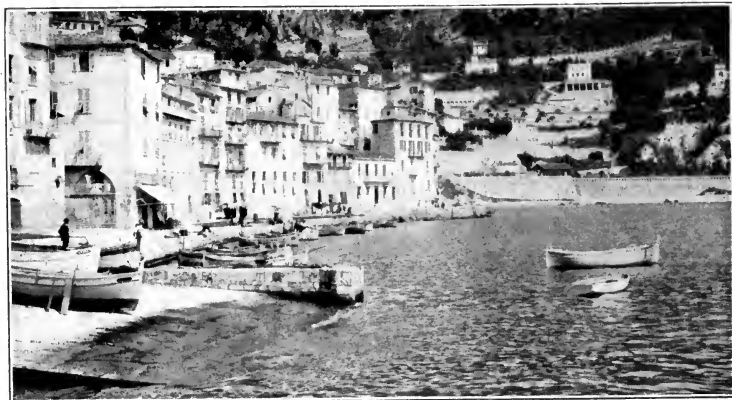
the shadow cast by the piece of paper was kept moving during the printing, so that its outlines would not be recorded in the picture.

After this was done the background was darkened by printing it for 30 seconds longer, while the face and the figure of the child and also the foreground were shaded. This shading was done with the hand, which was kept moving so that no shadow lines would be recorded. The hand was held about two inches from the lens. Then the foreground and the child's costume were darkened, by printing the foreground for another 30 seconds, while the face of the child and the background were shaded. During only about 10 seconds of this last printing period was the light allowed to reach the costume of the child.

In the case of some negatives it

is desirable to darken an area without darkening the tones that surround it. Suppose, for instance, it were desirable to darken the rendering of the rock against which the child is leaning, without darkening any of the surroundings. This could be done by cutting a hole in a piece of cardboard and allowing the light that would pass through the hole to reach the rock, while the cardboard shaded all the rest of the picture.

Locally controlling the printing of enlargements, which is much simpler to do than to describe, is the method that is most extensively employed by makers of large exhibition pictures. With a Kodak Auto-Focus Enlarger, which projects the image to a table top or some other horizontal support, it is the easiest printing "dodge" that the photographer can employ:



VILLEFRANCHE NEAR NICE

Made with a 3A Kodak, $\frac{1}{2}$ sec., stop *f.22*



THE EVENING SKY

Made with a Premo, by Alf. Erichsen

GETTING MORE CONTRAST IN THE PICTURE THAN THERE IS IN THE NEGATIVE

IN the preceding article entitled **TRANSFORMING "RECORDS" INTO PICTURES**, we have explained how to print some parts of a picture lighter and other parts darker than they would appear if every part of the negative was printed for the same length of time.

This method is especially adapted for lightening or darkening some of the tones, but it is not adapted for changing the contrast between the tones of the entire picture.

The range of contrast that is in a negative can be lessened, when making a print from the negative,

whether the print is made on Velox or on bromide paper, by merely printing long enough for recording all the negative detail and then under-developing the print; but undertaking to increase the contrast of a picture by the opposite method, that is, by under-printing and over-developing is impractical, because the maximum contrast that the paper can render is determined by the emulsion of the paper.

When it is desired to secure prints that will have more contrast than the negative contains, it is, therefore, necessary to use the



*Enlargement made on Velvet Bromide from an
under-developed negative*



*Enlargement made on Brilliant Velvet Bromide, from
under-developed negative*

kind of paper that is specially made for this purpose.

The negative from which the enlargements on pages 24 and 25 were made was so badly underdeveloped that any attempt to get a good print from it seemed hopeless. Contact prints on both Regular and Special Velox proved too gray and flat, but a print on Contrast Velox gave highlights that were bright enough with shadows that were dark enough to be pleasing.

After securing good contact prints some enlargements were made on Velvet Bromide, which records about the same range of contrast that the negative contains, and also on Brilliant Velvet Bromide, which gives much more contrast than can be seen in the negative.

None but the most enthusiastic advocate of very "soft" enlargements, that is enlargements that have scarcely enough contrast for clearly showing the subject, would be satisfied with the picture on page 24, because this is so flat that the eyes of the observer must wander all over it to get its meaning.

The picture on page 25 is vastly more pleasing because it has enough contrast between its tones to tell its story at a glance.

This story, of the child smelling the gladiolus, is typical of many a story that is enacted about the homes where there are children.

All negatives of children, whether they contain portraits or tell a story, whether they are technically good or technically bad

will, if they record expressions or attitudes that please the parents, make pictures that are of permanent value to the parents. For this reason the best contact prints or the best enlargements that the negatives can yield should be obtained.

If the negatives will make good prints on Special or Regular Velox they will also make good enlargements on Velvet, Royal or Enamelled (glossy) Bromide papers.

If the negatives are too contrasty for Special Velox they will make better enlargements on Standard or Matte-Enamel Bromide.

The negatives that are best adapted for making enlargements on Brilliant Velvet Bromide are those that are so lacking in contrast that they will yield brilliant contact prints on only the most contrasty grade of paper—negatives like the one we have mentioned, that had to be printed on Contrast Velox in order to get a contact print that has bright highlights and dark shadows.



ENTERTAINING THE FAMILY
Made with a No. 1 Kodak Jr.



UNDER A HAPPY SKY

*Made with a single lens 3A Folding Brownie,
by E. Leonard Stapleton*

SERVICE DEPARTMENT TALKS

FLASHLIGHT PORTRAITS

ALWAYS make indoor flashlight portraits in a fairly well lighted room. Keep the light turned on while the exposure is being made. It is needed for comfort and also for avoiding the staring eyes that result when flashlight portraits are made in dark rooms.

One or two lamps, whether oil, gas or electric, are sufficient. If electric light is used, two 25 watt lamps will furnish all the illumination that is needed. By opening the shutter just before, and closing it immediately after the flash is made, the light from the lamps will not appreciably affect the film.

The image can easily be located in the finder, or on the ground glass, by having the subject hold a lighted candle, or a small flash lamp close to the face.

Full instructions for making flashlight pictures are furnished with all Eastman flashlight preparations.

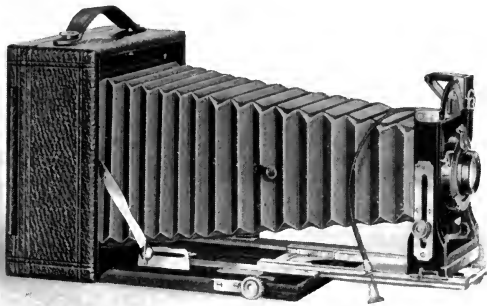
Be sure to read the instructions carefully, and observe all the precautions that the manufacturers of the preparations recommend.

The booklet **BY FLASHLIGHT** can be obtained, free of charge, from all Kodak dealers. It will also be forwarded on receipt of a postal addressed,

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED

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ONCE it's the swing bed that saves the day, again it's the reversible back, the rising and falling front, the focusing panel or the long bellows. All these advantages are available on the Premo No. 9 so that you can get excellent results from a great variety of subjects.

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Prices range from \$40 to \$105, depending on the shutter and lens you select. Premo catalogue free by mail or at your dealer's.

Canadian Kodak Co., Limited

Toronto, Canada

Kodak Cut Film

GIVES you plate advantages with none of the drawbacks, plus the film features that spell superior negatives. Freedom from halation, for example, means freedom from clogged highlights and degraded halftones.

Kodak Cut Film is supplied in two speeds—regular Kodak Cut Film, equal to the best portrait plate emulsion, and Kodak Cut Film *Super Speed* which is extra fast to cope with difficult photographic conditions.

The Kodak Cut Film Sheath adapts any plate holder for use with Kodak Cut Film, and with the Combination Back both regular and *Special* models of the Nos. 3 and 3A Kodaks can be adapted for its use.

PRICES

	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, doz. . . .	\$0.45	\$0.65	\$0.90	\$0.90	\$1.45
Kodak Cut Film <i>Super Speed</i> , doz.50	.75	1.00	1.00	1.60
Kodak Cut Film Sheath12	.12	.18	.18	

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GRAFLEX

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Until the instant of exposure you see in the hood just what is going on. Finger-tips of the right hand control the focus. Left thumb releases the shutter whenever the scene satisfies.

Speeds for every need — $\frac{1}{1000}$ of a second to $\frac{1}{10}$, a slow snapshot of $\frac{1}{8}$, adjustments for "time." And the abundance of light which passes through the Graflex focal plane shutter and Kodak Anastigmat lens *f*.4.5 is more valuable than ever, now that the days are short.

Ask your dealer, or us, for the Graflex catalogue

Canadian Kodak Co., Limited

Toronto, Canada



*For the
Living-room,
Library or
Den—Your
Kodak Pictures
Framed with*

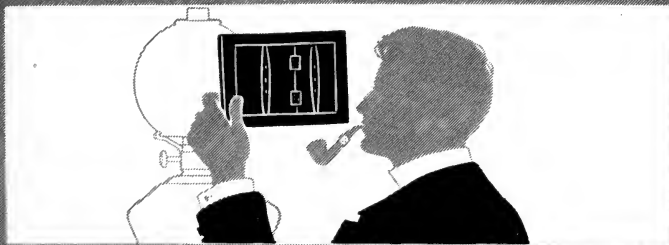
KODAK SNAPSHOT FRAMES

Made of $\frac{1}{2}$ -inch wood moulding, with brown mission finish to take prints of all the standard sizes from Vest Pocket ($1\frac{5}{8} \times 2\frac{1}{2}$) to 3A ($3\frac{1}{4} \times 5\frac{1}{2}$), and for enlargements 5×7 , $6\frac{1}{2} \times 8\frac{1}{2}$ and 8×10 .

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VELOX

Made especially
for
the amateur

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negative — exposure
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No. 1 Autographic Kodak *Special*

FROM rising front to autographic back this *Special* stands as a conspicuous achievement in pocket camera construction.

KODAMATIC SHUTTER provides a fast exposure of $\frac{1}{200}$ second, six other adjustable speeds down to $\frac{1}{2}$ second—all readily regulated and timed with scientific accuracy—and time and bulb actions. A sliding scale tells you the speed to use for each of the several diaphragm openings.



KODAK ANASTIGMAT *f*.6.3 safeguards results. This lens is Eastman-made for sharp-cut, sparkling prints. Picture size, $2\frac{1}{4} \times 3\frac{1}{4}$ inches.

\$50

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CANADIAN
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TORONTO, CANADA

KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



FEBRUARY 1923



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA,



Kodak Magnesium Ribbon Holder

THIS simple little device provides a handy and convenient method of burning magnesium ribbon to obtain light for photographic purposes.

The flame goes out automatically when a given length of ribbon burns down to the holder thus furnishing a convenient standard for timing the exposure of prints on Velox and other developing papers. The apparatus is useful as well for photographing dark interiors, for copying, and for portraiture.

The best method of igniting the ribbon is by means of an alcohol lamp specially constructed for this purpose.

THE PRICE

Kodak Magnesium Ribbon Holder . .	\$0.35
Alcohol Lamp for use with Kodak Magnesium Ribbon Holder35

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CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

For Snow Pictures—



THE KODAK SKY FILTER, in an inverted position with its yellow half covering the lower half of your camera lens, relieves the reflected brightness of the snow and brings out the shadow detail. In its regular position, it reduces the light intensity of the sky and brings out cloud forms. The result, in either case, is more exact reproduction on the film of what the eye sees.

At your dealer's

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



BRITTANY PEASANTS IN GALA DRESS

Made with a 3A Kodak; exposure $\frac{1}{2}$ second, stop f.16

KODAKERY

A Journal for Amateur Photographers

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VOL. X

FEBRUARY, 1923

No. 4



BY THE LIGHT OF ARC LAMPS

*Made with a Premo, by Alf. Erichsen; 8:30 P. M., February;
exposure 6 minutes, stop f.7.7*

THE MAGIC TOUCH OF NIGHT

Who has not been an interested observer of the changes that occur in the appearance of the landscape as

day gradually merges into night?

After these changes have taken place many scenes that seemed commonplace under the noonday

sun are made attractive by the feeble light which reveals their outlines without disclosing their details.

The magic touch of night is sometimes emphasized by the moon, and it is always accentuated wherever electric lamps place highlights on interesting outdoor scenes.

These highlights are the important tones that, when contrasted with the other tones which

we can see in objects at night, make outdoor night photography by electric light a pastime of special interest. Without the highlights the subject might be suitable for a photographic record, but it would not make a picture.

The presence of snow greatly simplifies our outdoor night work. It is on the snow that the light of nearby lamps places highlights, and it is the shadows on the snow that form the halftones for our picture. The blacks, which are needed for making a night picture look like a real night scene, always exist wherever dark objects, such as buildings, fences or trees are included in the foreground of the view.

Our illustrations suggest the possibilities of this field, which has been but little explored.

Subjects abound in every city and village where the streets and parks are lighted by electricity.

Nearby lamps should never be included in such pictures. They mar the pictorial effect.

As time exposures must be given it is necessary to use a tripod, or place the camera on some rigid support.

The exposures that have given splendid results have ranged from 5 to 20 minutes, with stop No. 4 (*f.8* or *f.7.7* on anastigmat lenses) and from 10 to 40 minutes, with the largest stop on single lens cameras.



A DECEMBER NIGHT SCENE
 Made by G. L. Wakeman; exposure
 15 minutes, *f.6.3*



FIG. 1—*Graflex negative: 1/10 of a second, f.16*

EVERY DAY WITH A GRAFLEX

UNTIL he uses his camera on ordinary as well as spectacular subjects, the Graflex owner cannot appreciate how valuable its benefits are. For easy, as well as difficult scenes, the Graflex features make good results more certain.

When one can look into a light-tight focusing hood and watch on a ground glass a big, brilliant, right-side-up image of his subject, the problem of getting sharp focus and good pictorial arrangement is simplified. There is no danger of the scene changing between focusing and exposing, because composition and focus are under control until the instant that the shutter release is pressed.

Furthermore, the ability of the

focal plane shutter and large aperture to admit an extraordinary amount of light to the film reduces the possibility of under-exposure.

With composition, focusing and exposure—the prime elements in making good pictures—facilitated for him, the Graflex user should expect especially fine results if he understands his camera.

The charm of making pictures with a Graflex lies in the ease with which the photographer can arrange the composition, and the certainty with which he can secure sharp images of every object the picture shows. He can also, if he prefers, secure sharp images of only the chief objects of interest, and have other objects less conspicuously rendered by being out of focus.



FIG. 3—Graflex negative: $1/330$ of a second, $f.4.5$

In a picture like Fig. 1, for instance, everything behind the lady could easily have been rendered out of focus—by using the $f.4.5$ lens stop, with the focus set on the flowers she is examining.

In making such a picture as Fig. 1 the photographer first selects the viewpoint from which he sees the important objects duly emphasized and the lesser objects shown in correct relation thereto. Always watching the image in the focusing hood, he approaches or withdraws until the image on the ground glass includes exactly what he wants in the picture. Since the image is full negative size, he can study the details, and the focus is thoroughly under control.

For catching interesting poses in children the reflecting mirror easily

proves its value. The vivacious little youngster in Fig. 2 was using the sun porch for a gymnasium. Her father watched in the focusing hood every move that she made. The minute that she struck an interesting attitude he pressed the lever and was sure of just what the negative would show.

Action scenes, such as the picture of the acrobatic dog, Fig. 3, take the Graflex back to the sort of work for which it was first famous.

In making such pictures, consult the exposure table in the manual and select the slowest, not the *fastest*, shutter speed that will stop the action. With speeds as swift as $1/1000$ of a second, the temptation is to choose one that is faster than necessary, sometimes needlessly sacrificing ample exposure.



FIG. 2—Graflex negative: $1/5$ of a second, $f/4.5$

The dog picture, Fig. 3, could have been made with the shutter set at $1/235$ of a second at $f/4.5$. It is a simple example of speed picture, to be sure. Very often, however, the moving object is moving to-

ward or from the camera. Then the photographer appreciates more the features that enable him to compose, focus, and make the exposure almost simultaneously. And he has the assurance that his



FIG. 4—*Graflex negative: 1/5 of a second, f.4.5*

shutter and lens will utilize all the light that the subject reflects.

The dining room scene, Fig. 4, was photographed at $\frac{1}{5}$ of a second with stop *f.4.5*. The room was unevenly lighted, to be sure, but

not only the portions that received direct rays of light but also those that are in the shadow show considerable detail. Yet the difference in illumination is tremendous.

A SIMPLE TEST

SHOULD the margins of pictures that you printed through masks be gray instead of white, you should test the light by which you handle and develop the paper. To do this place an exposed sheet of Special Velox paper, emulsion side up, on your work table, in the same position that your developing tray occupies when you develop prints. Cover one-half of it with a sheet of cardboard

and let it remain there for two minutes, then develop it, face down, for 45 seconds with any of the developers recommended by the manufacturers of the paper. If the half of the sheet which was uncovered appears gray, while the part that was covered remains white, after development, your light is not safe; but if the entire sheet remains white your light is safe.



THE COMING STORM

*A scene in Hastings Park, Vancouver.
Made with a 3 Special Kodak, by Dr. Kube*



AT LOW TIDE

Made with a 3A Special Kodak; 1/10 second exposure, stop f.32



FROM A PRINT ON SPECIAL VELOX

THE CONTRAST IN THE PICTURE

ONE of the most important things in photographic printing is to secure such contrast between the tones as will be most pleasing in the finished picture.

The contrast that can be obtained between the blacks, the grays and the whites of a picture depends, both on the contrast there is in the negative and, on the range of contrast that can be recorded by the paper on which the picture is printed.

If we make a print from a negative of little contrast, on a paper that will record the same contrast there is in the negative, the print will lack snap and brilliancy. Should we print just long enough for keeping the brightest tones

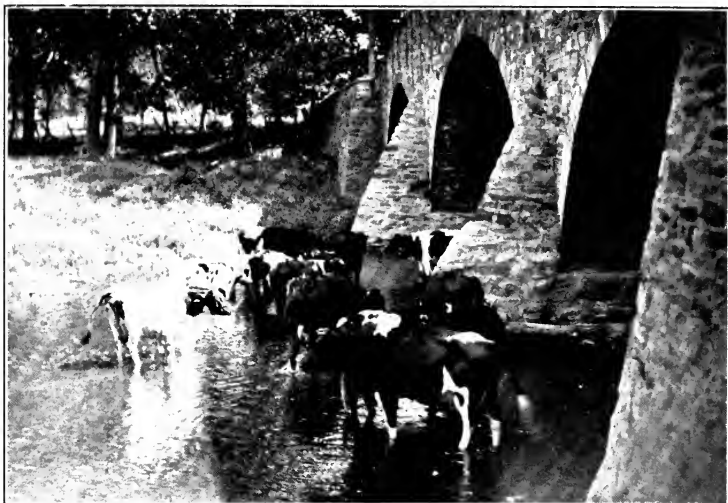
white the darkest shadows will be gray instead of black. And should we print long enough for recording the darkest shadows in black the brightest lights will be rendered in gray instead of in white.

The only way in which a print, that has black shadows and white or nearly white highlights, can be made from such a negative is by using a paper that will record more contrast than there is in the negative.

On the other hand, if we make a print from a negative that has strong contrasts, on a paper that records the same contrast there is in the negative, we will obtain a print that will, should we print for the shadows, have too little detail, or no detail whatever, in the



FROM A PRINT ON REGULAR VELOX



FROM A PRINT ON CONTRAST VELOX

highlights. And should we print for highlight detail, the lighter shadows will be rendered so dark that but little of the shadow detail that can be seen in the negative will be visible in the print.

For such a negative it is necessary to use a paper that will record less contrast than there is in the negative.

There is a wider difference of opinion about the amount of contrast that is permissible in landscape pictures than in portraits. The reason for this is that too light or too dark a rendering of some of the tones in landscape pictures



CONTRAST VELOX



REGULAR VELOX

is not as obvious as it is in portraits.

We so often see the sky part of a landscape picture represented by a blank expanse of white that we have grown accustomed to it, but we do not like to see the human face, or pale blue or white costumes, which contain plenty of detail, rendered as blank white spaces in a picture.

These facts are made apparent by our illustrations. The landscape pictures on pages 11 and 12 show, approximately, the different degrees of contrast that were obtained by making prints from the



SPECIAL VELOX

same negative on Special, Regular and Contrast Velox.

In comparing these illustrations it must, however, be remembered that these are not photographic prints. They are halftone reproductions of photographs. Since it is impossible to reproduce, by the halftone process, all of the delicate tones the photographic prints contain, these illustrations only give a general idea of the differences there are in the actual photographs.

The photographs from which these pictures were reproduced were submitted to several people, who were asked to select the one

they considered most pleasing. Some preferred the Special, some the Regular and some the Contrast Velox print.

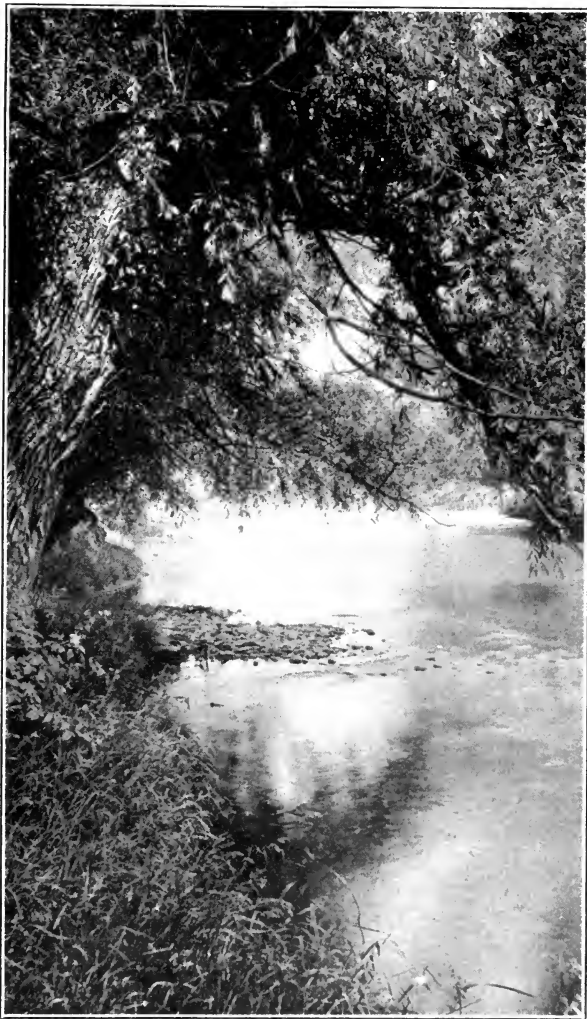
The portrait on this page, and those on the preceding page, were likewise reproduced from prints on the three grades of Velox. The photographs from which these were made were also submitted to the same people, all of whom preferred the least contrasty, that is, the Special Velox print.

It must not be supposed, however, that Special is always the best grade of Velox to use for portraits. The grade to use depends, in the case of portrait as well as in the case of landscape and all other negatives, on the contrast there is in the negative.

Velox paper is made in five surface finishes. These are known as Glossy, Velvet, Royal, Carbon and Portrait. The surface finish has a marked effect on contrast, a glossy surface giving more contrast than a matte or dull surface.

The utmost contrast can be obtained on the grade known as Contrast Glossy, and the least contrast on the grades known as Portrait and Special Carbon.

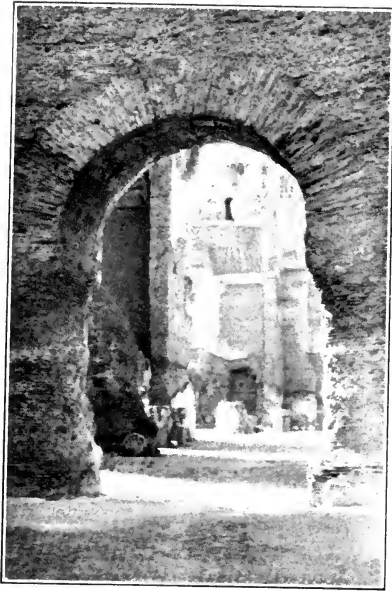




COOL WATERS

Made with a 3A Special Kodak, by W. F. Shorney

THE POETRY



Made with an Auto Graflex Jr.



Made with a 3A Special Kodak



Made with a 3A Kodak

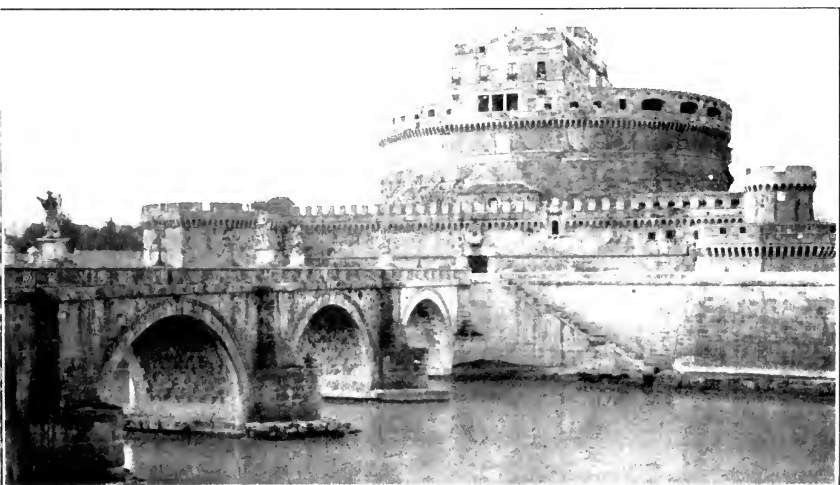
OF THE ARCH



Made with a No. 3 Kodak



Made with a No. 2 Brownie



Made with a 3A Kodak



AUNT KEWPIE'S PARTY

"Now, children, get two more chairs."

A NEW ANGLE ON DOLL PHOTOGRAPHY

BY CARTOONIST BRADFORD

Illustrated with Enlargements, by the Author

IN groping at the shadow, we sometimes give the substance the cold shoulder. We are so apt to think it necessary to go miles afield to hunt up subjects for our Kodaks, when by the exercise of a little thought we can find splendid material right at our home, where we trot around day after day, like doodle bugs in a pill box, to the tune of: "Where do we go from here?" and get nowhere.

Dolls! To one who will give the matter a little thought, here is a field that has been but lightly tilled. Little doll parties, with little girls soberly intent upon social duties that such a momentous occasion entails. And, who is that standing by with a condescending and tolerant look—not having been invited? Why, it's Jimmie, who will eventually be taken into the fold, and who will gladly assume the character of a



THE KEWPIE BALLET

GRAND CHORUS

"We are Kewpies, wee and wise
Merry twinkle in our eyes."

Doctor for a sick dolly. There's the idea for your picture, only one of hundreds that a little imagination will conjure up, in connection with dolls.

It yet remains for some one to arrange a party of larger dolls entertaining smaller ones. We can easily construct a ship of imagination, as it were, with a combination of large and small dolls, that will sail on into realms of wonderful possibilities. The little Kewpie dolls are most suitable for the guests, doubly so on account of the pleased looks they wear, which all guests are supposed to have.

Hostess doll can be propped up

from behind, hiding the prop, and the tea pot can be tied to her hand. Little tables can easily be constructed, or bought for a small price.

The "Kewpie Ballet" shows the possibilities of these little dolls. For this picture a stage was made of cardboard and placed on a table. The "planking" effect was drawn on with india ink. An electric light (any artificial light will do) with white paper reflector, was placed a foot lower than the table top, just in front of the tripod which held the camera, so as to give the "footlight effect" of a stage. A dim overhead light (above the camera) was also used, to



THE BATHING GIRL

"I wonder if the water's fine?"

furnish a general illumination, so as to break up the otherwise harsh contrasts.

Notice the illustration, "The Bathing Girl." Real water, as far as the effect is concerned; also a sandy beach. You can see, and almost "feel" that it is sand. "Difficult" is the first thought that arises, but it's as simple as Simon was. The only difficult part is to get permission from the feminine boss of the house to use a large mirror, or take the mirror frame apart, from a dresser, for that's what this "lake" is. The fence was cut from white card board, and a box of the canary's gravel made the beach. A large sheet of brown paper furnished the background. The strong light that cast the black shadow was placed

on the right side, on a level with the table top, on which the mirror lay. The fainter shadow above it was cast by a weaker light placed a foot above the floor, directly under the strong side light. A weak light, that was not strong enough to kill that desirable shadow, which adds to the composition, was also placed high above and a little in front of the doll to illuminate the bonnet. Were I to make this again, I would make the "beach" extend out farther, in order to diminish the "weight" or size of the bottom reflection, thereby giving more importance to the figure proper. It was made this way, however, in order to drive home the thought of concentrating on, or emphasizing your figure. That's a safe rule to always observe in photography.



THE OLD SWIMMING HOLE

"What's the matter son, water cold?"
"Yeth thir—and wet!"



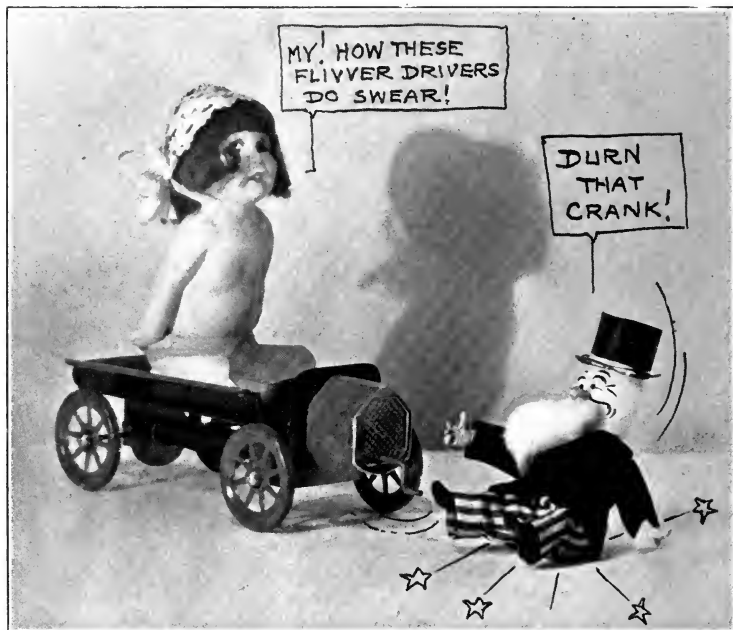
"LAND HO!"

Noah sights Mount Ararat.

Notice the old man doll with cotton batting beard. He is home made, using an egg shell from which the contents have been "blown." The facial expression was drawn on the shell with india ink.

In "Land Ho" we see the egg-head man posing as Noah on his personally conducted tour to Mount Ararat. The hull of the Ark was made of a bit of board,

and the house of cardboard, the plank streaks and the windows were drawn on with india ink. The lighted candle is our old "double exposure" trick of first giving an exposure long enough for recording the subject when the candle is not lit, then closing the shutter, lighting the candle and making a one or two second exposure, for recording the candle flame.



THE DEADLY FLIVVER CRANK

Wording can be lettered in on the prints, and adds in giving a life-like, human touch which inanimate figures so invariably lack, as seldom do the facial expressions fit the part they are portraying. Notice "The Deadly Flivver Crank"—it is the conversation that gives this the elements of a cartoon, or comic sketch.

Attention is called to the use of shadows in these pictures; how empty the picture, "Mama Doll Gives a Tea" would be were it not for that shadow on the left!

This acts as a "balance." Turn this picture upside down—you will "feel" the proper visual "weight,"

the same as when looking at it in its right position. Did you know that this is a mighty good way, too, of judging a picture as to composition, when all other methods fail, or you are in doubt? Yessir, a picture that will "balance" upside down, as well as right side up, can be considered "Okeh," as far as composition goes. This is an old "Whistler" trick, though not generally known.

If you want to make a group, or crowd, select figures that have different colored costumes so as to get a little contrast, otherwise your figures are apt to "mass" together, and lose effectiveness.



MAMA DOLL GIVES A TEA

Half close your eyes in studying your picture. This will serve to subdue detail, and allow you to see form and color, and arrange accordingly.

Study and plan as you go along. Don't hurry for the finished print,

remember that the planning of these little stunts is a schooling from which we can learn much about camera technique, which after all consists in the picture planning.

EDITOR'S NOTE.—While Mr.

Bradford's pictures were made by electric light every one of them could have been much more easily made by daylight, by the side of any ordinary living room window. The daylight pictures would not contain double shadows, but they would be attractive.

The daylight method is extremely simple: merely place a table near a window, suspend a white paper background from a T shaped stick supported behind the table, then place the dolls in position and move the table about, close to the window, until the

lighting, as viewed from the position of the camera, shows the shadow effects that are wanted. The shadows can be plainly seen against the white background. If a gray ground is wanted substitute brown wrapping paper for the white paper background. For a black ground use any black paper or cloth.

The largest images your hand camera can make will be obtained by placing a Kodak Portrait Attachment in front of the lens.

The exposure, with largest lens stop, will range from 1 to 5 seconds.



A POPULAR FALLACY

WE have often read statements advising photographers not to make exposures immediately after taking the camera out of doors in very cold weather, the reason offered being, that cold air will cause moisture to condense on the lens.

The fallacy of this statement is apparent to all who wear eye glasses. Glasses "steam," that is, they condense moisture from the atmosphere when they are suddenly taken from a cold to a warm place. This happens when the wearer enters a room after having been out in the cold. Glasses never condense moisture when taken from a warm to a cold place. If they did the moisture would freeze when the temperature is below 32 degrees, so both eye glasses and lenses would become coated with frost.

Now there *is* a logical reason

why exposures should not be made immediately after taking the camera outdoors in extremely cold weather, this reason being that lenses should be protected against sudden extreme changes of temperature. This is satisfactorily guarded against when the camera is kept closed, preferably in its carrying case or in the pocket, for 10 or 15 minutes. This permits the lens to acquire the temperature of the air gradually.

On entering the house in winter time the camera should not be left near a stove, hot air register or radiator.

Though very few amateurs have probably ever given any attention to the precautions we have mentioned, the known cases of a lens having been injured by neglect of these precautions are extremely few. It is, nevertheless, well to heed them.

WHAT A PORTRAIT ATTACHMENT IS

THE Portrait Attachment is a supplementary single meniscus lens which is intended to shorten the effective focus of the lens over which it is placed, so as to make it possible to focus objects at a short distance without too great an extension of the camera bellows.

With the ordinary Kodak, the extension of bellows will not permit subjects to be focused which are nearer than six feet, while with the Box Brownies, which have no focusing attachment, photographs will not be sharp at dis-

tances nearer than those stated in the manual, which accompanies each camera, unless the Portrait Attachment is used.

The Portrait Attachment therefore enables one to place the camera nearer the subject and thus obtain larger sharply focused images than would otherwise be possible.

It is especially adapted for making portraits, photographing flowers and other subjects at short range, but is not intended for photographing landscapes or other distant objects.



A SINGLE PURPOSE LENS

As a rule Anastigmat Lenses are made to serve a dual purpose.

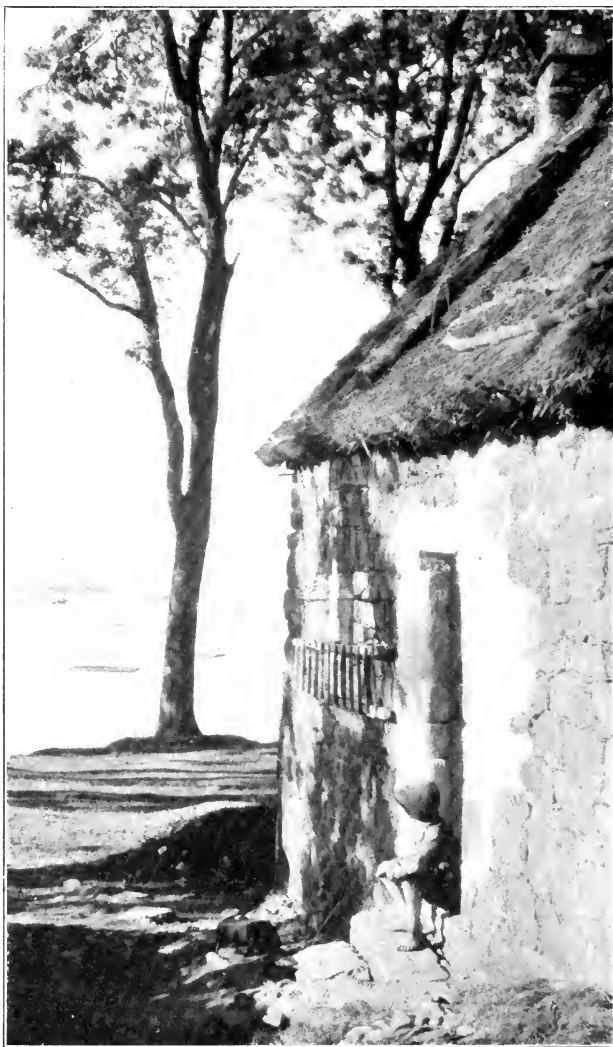
A lens that is to cover, say a 4 x 5 plate at its largest opening, is intended also for a 5 x 7 plate as a wide angle lens when used with a smaller aperture. It is therefore corrected to hit the happy medium and serve both purposes.

The Kodak Anastigmats, being designed especially for the size of cameras for which they are listed, are corrected to cover only that particular size, the result being that they give the utmost in efficiency for the specific purpose for which they are designed, and they can be made and sold at a lower price than lenses which have to serve two purposes.

For Kodak use you cannot get better lenses than the Kodak Anastigmats, at any price.



A FLASHLIGHT PORTRAIT
Made with a 3A Kodak



A GLIMPSE OF THE HARBOR

Made with a 3A Special Kodak; exposure 1/10 second, stop f.22

ORDER FILM BY NUMBER

THERE are many models of roll film cameras in use that make negatives of the same size but require film spools of different lengths. This is owing to differences in the styles of the cameras.

Should you order a certain size of film from your dealer, without mentioning the style of camera you are using, he might not know what you need, but if you order by number he will know exactly what to give you. To illustrate: The No. 3 Folding Pocket Kodak, the No. 3 Cartridge Kodak and the No. 3 Brownie all make $3\frac{1}{4} \times 4\frac{1}{4}$ negatives, but they are different styles of cameras and require film spools of different lengths. The film made for one of these cameras will fit neither of the others.

Eastman N. C. Film and Eastman Autographic Film are packed in cartons. A number is placed on the ends of each carton. This number indicates the size of negative the film will make and the style of spool on which the film is wound.

The $3\frac{1}{4} \times 4\frac{1}{4}$ size of Eastman roll film is listed under four numbers, and is made for use in eight styles of Eastman cameras. Three styles of these cameras use film No. 118, three styles use film No. 124, one style uses film No. 119 and only one style requires film No. A118.

The 3A size of film is listed under three numbers, the 4×5 size under four numbers and some other sizes are also listed under two or more numbers.

The letter A preceding the number on a film carton indicates that the film is autographic. If you are

using an Autographic Kodak, or an Autographic Brownie, make sure you order Autographic Film. Autographic records cannot be made on old style film.

Every year has witnessed improvements in Eastman Cameras. Some of these improvements have necessitated changes in the film spools. Since all models of Eastman cameras, from the oldest to the most recent, are in constant use, films must be supplied for all these models.

The number of the film used in any size or style of Eastman roll film camera is printed in large type in the manual that accompanies the camera.

Always order film by number that you may be sure of obtaining the film you need.



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If you change your address without notifying us, KODAKERY will not reach you. Requesting the postmaster to forward your mail will not insure your receiving KODAKERY, unless you pay him the postage for forwarding it.

Should you move from one place to another be sure to inform us promptly, giving both your old and new addresses, and also the date when your subscription expires.

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PRINT CRITICISM

HAVE you any negatives that you value, from which you have never obtained satisfactory prints?

If so, send them to us, together with the best prints you have secured.

Tell us the name and grade of paper on which the prints were made. We will promptly return both negatives and prints and, if the pictures are not as good as the negatives should yield, we will tell you how to make better ones.

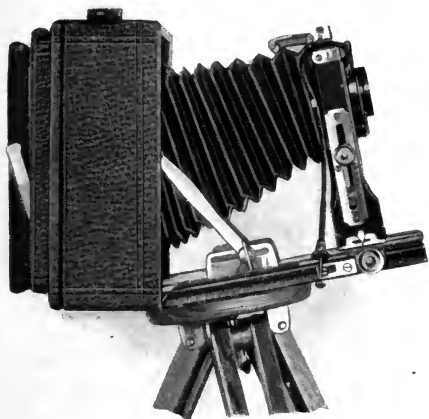
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TORONTO, CANADA

This Camera is Complete



Premo No. 9

PLEASING composition often requires special equipment—reversible back, focusing panel, swing bed, rising and falling front. All these features are found on the Premo No. 9.

The Planatograph lens is convertible. Although the complete lens will do copying to almost full size, it is often desirable to use a single element, thus doubling the focal length—a valuable advantage in landscape work, for example.

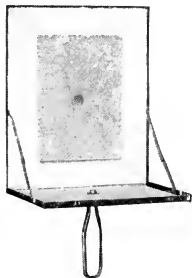
Premo No. 9, with Planatograph lens, Kodak 4x5 3¼ x 5½ 5x7
 Ball Bearing shutter, Case and Holder . . \$40* \$40 \$50

Other equipments for this Camera are described and listed in the Premo catalogue, free by mail or at dealers'

Canadian Kodak Co., Limited

Toronto, Canada

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Eastman Flash Sheets and the Kodak Flash Sheet Holder

GIVE you convenient control over both the amount of light and its direction, and make you independent of daylight.

Whether mounted on a tripod or held in the hand, the metal back of the holder is always between the operator and the flash.

Eastman Flash Sheets \$0.35 up
Kodak Flash Sheet Holder 1.50

Ask us or your dealer for the booklet "By Flashlight." It explains in a simple, understandable style how you can make pictures at your house when daylight fails, and it's free.

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

All dealers'

The Little Prodigy of the Graflex Family

Revolving Back Graflex Junior

Pictures
 $2\frac{1}{4} \times 3\frac{1}{4}$

R. B. Junior is small, indeed, but it has the equipment of its bigger brothers—the same reflecting mirror, focal plane shutter and high speed lens.

The light-tight, smooth-acting revolving back is an added advantage. This camera remains in normal position when photographing vertical subjects.

Cut film, plates, film packs and roll film can be used in the proper attachments, all of which have dark slides so that they may be interchanged between exposures.

Price, including Kodak Anastigmat lens *f*.4.5, of 6½ inch focus, \$84.00.

Graflex catalogue free by mail or at dealers'

Canadian Kodak Co., Limited

Toronto, Canada

To add interest and improve results in
indoor Photography

Kodak Metal Tripods



Especially compact and light when folded—rigid and strong when opened. The telescoping legs are of nicked brass and upper section is finished in black enamel. Ideal for every amateur use.

Price **\$3.75** up

Kodak Portrait Attachment



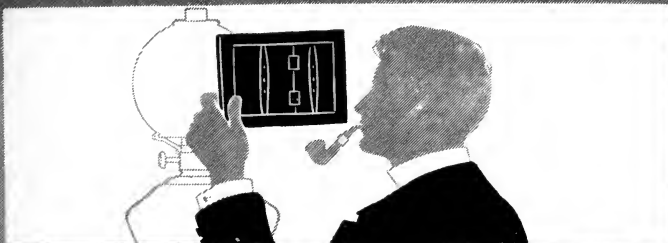
For head and shoulder portraits in true perspective and accurate focus. Adapted for all kinds of "close up" work. It slips over the lens without altering the exposure or operation of the camera.

Price, **75c.**

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TORONTO, CANADA

At your Kodak Dealer's



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VELOX

is preferred by the amateur who
wants the best
from every negative

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At all Kodak Dealers'



No. 1 Autographic Kodak *Special*

Pictures, $2\frac{1}{4} \times 3\frac{1}{4}$

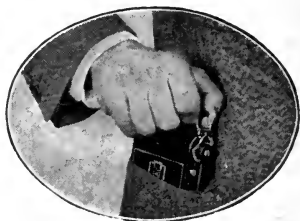
Price, \$50

KODAK Anastigmat Lens
f.6.3—Eastman-made for
better pictures, and Koda-
matic Shutter—Eastman-

made for accuracy, give the 1 *Special* a distinctive position among hand cameras.

The lens assures sharp, brilliant negatives; the shutter has seven speeds from $\frac{1}{2}$ to $\frac{1}{2000}$ second in addition to time and "bulb" actions—an ample range for practically any picture in the hand camera field.

*Slip it in the pocket
and bring
good pictures back.*



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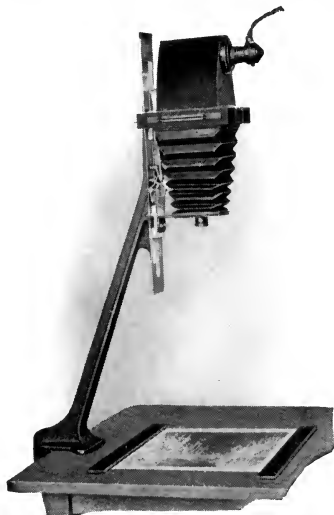


MARCH 1923

5¢

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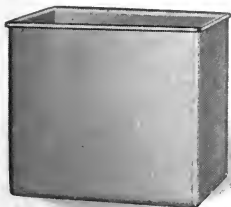
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Enlarged from a $2\frac{1}{4} \times 3\frac{1}{4}$ negative by C. N. Waterer



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VOL. X

MARCH, 1923

No. 5



KITE TIME

Made with a Premo, by Ira T. Bronson

THE YEAR'S STORY

BY ALBERT CRANE WALLACE

THE biography of a year gets into writing and into print, or at least into talk, in one way or another. This biography of a year has a right to be illustrated. Pictures help not only to make the year vivid but to give exactness to

the narrative. You might call the Kodak the boss biographer.

There is one thing about the illustrating of a year that ought to be mentioned in its favor at the very beginning. A good deal that gets into writing and into print is



WITHOUT FANCY TACKLE

Made with a Graflex, by Ira T. Bronson

a record of disaster—undesirable things that happen. When you keep a diary you are more likely to mention that there was a terrible storm than that there was lovely sunshine. In fact a good many people keep diaries to complain to.

To record only the unpleasant isn't fair to the year. The honest truth is that most of us remember happy things that never get full credit. When we come together with our cronies and talk over past experiences we even laugh about a great many things that seemed tremendously uncomfortable when they happened.

So that every means of remind-

ing us of the sunny side is a good investment—an investment that fits in cheerfully with our natural habit.

Our Kodak, with its autographic reminder of just when and where, is always looking for the bright side. It has a way of preferring the beautiful, the amusing, the things that really count. Just because it likes sunshine, because it is not a dark prowler, it helps remind us that most days are sunny. And that is worth while.

One gloomy novelist had a character who looked out of the window and cried, "It's always raining!"

Well, if you ever get into the



PROPHECIES OF THE CIRCUS

Made with a Graflex, by Ira T. Bronson

“always raining” state of mind the Kodak’s biography of a year will help check you up, keep reminding you how much brightness found a way of slanting into your life. The Kodak is just naturally a cheerful historian.

It reminds you, for example, of the fun that happened on the day when the kite flew so high and pulled so hard and all hands were so much excited.

It reminds you that there never was a handsomer day than the day of that fishing experiment with an improvised pole. You can’t get a Kodak to admit that the fish didn’t bite. It sticks to the great point—

the fun of fishing, whether there are fish or not.

I have been looking at this picture of the boys and the circus posters, and of course I’ve been thinking all over again of the great days I used to have at circuses—just as an express train picture can carry you right square out of the page and off on that wonder journey that belongs to the diary of the year.

But the year’s story isn’t taken up with spectacular happenings. It is the little incidents that sometimes hold the biggest stories. A Kodak picture is a kind of text, or say a chapter heading under which



THE ICEMAN

Made with a No. 1 Kodak Jr.,
by James J. Ryan

your memory quickly fills in the narrative. The activities of the iceman were a true part of the year's history; and beyond all that, beyond all the actual *facts* of the year, there are the things that homely pictures as well as unusual pictures can *suggest*—the things they make you think of quite outside of all narrative.

And I wouldn't overlook the purely *picture* interest. I find that a great many negatives grow in picture interest—that though they were made, perhaps, in a spirit of record, they can reveal in later

study picture charms that we didn't altogether suspect at the time of the first printing. This is to say that they began with a story interest and came to have a real art interest as time passed.

Both sorts of interest belong to all who own a Kodak. We never can tell how the two sorts will cross each other. I have tried making an artistic picture, with only the art in mind, and found later



A SEA VENTURE

Made with a No. 2 Brownie,
by P. E. Fitzgerald

**WITH DOG AND GUN**

Made with a Vest Pocket Kodak, by James J. Ryan

that the *story* interest, something on the human side, seemed to be much more important than the art. Perhaps the best art of all is the art that can give us, at its best, these afterward pleasures of the human side. Remembering this I never

like to discard a negative simply because it is technically imperfect. Some of my most precious possessions are negatives that are neither very good science nor very good art. May as well admit it—they are first attempts at the baby!

**WHEN THE EXPRESS GOES THROUGH**

Made with a No. 12 Premo, by W. L. Baldwin



*Made with a Graflex, by Roy L. Chne;
exposure, $\frac{1}{2}$ sec.; $f.4.5$*

WINDOW BACKGROUNDS

LIGHTING effects that cannot be secured in any other way may be obtained by using a window as a background for indoor portraits. Some of these

lighting effects are as attractive as they are unusual.

In small rooms a lace curtained window often makes the best background that is available, and in



*Made with a Graflex, by M. W. Reeves:
exposure, $\frac{1}{5}$ sec.; $f.4.5$*

large rooms that have dark toned walls the window background may furnish the only light toned area that can be included in the picture.

Indoor portraits with window backgrounds can be made on sunny

winter days, as well as in the summer time, with exposures as short as $\frac{1}{10}$ of a second, if the largest stop on an $f.4.5$ lens is used; but as $\frac{1}{10}$ of a second is long enough for recording movement it is

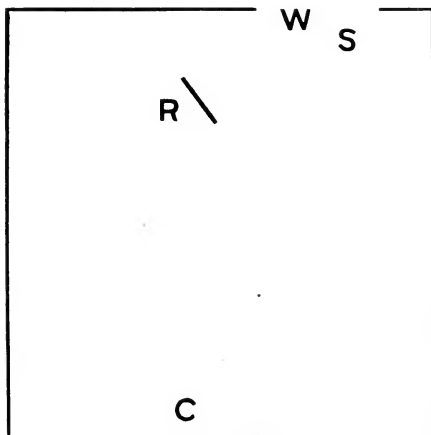


DIAGRAM 1

S—Subject *C*—Camera
R—Reflector *W*—Window

necessary, when active children are to be photographed, to devise some method for keeping them quiet. A method that is usually successful is to have some one attract their attention, or to have them looking at pictures. The result of having them interested in something outside of the window is shown by Mr. Reeves' picture, on page 9.

For making a picture similar to this a reflector of white cloth or paper, not less than 3 feet square, must be used for lighting the side of the face that is farthest from the window. The reflector may be supported on T shaped sticks, which can be tied to the back of a chair. The top

of the reflector should be a little higher than the subject's head, and it should be placed about four or five feet from the subject, in the position shown in Diagram 1.

With the reflector in this position the strongest light, which is on the forehead, nose and chin, will blend into the reflected light on the cheek. Without a reflector the shadow side of the face will usually photograph in too dark a tone.

A full face portrait, similar to the one made by Mr. Douglas (page 11), can sometimes be made in a three window bay without a reflector, but in most cases a reflector should be used near the camera, at either of the

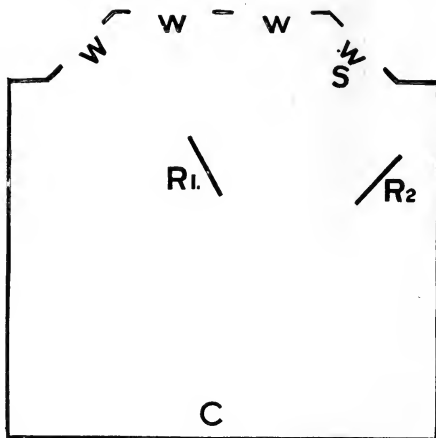


DIAGRAM 2

S—Subject *C*—Camera *W*—Windows
R1 and *R2*—Positions for a Reflector



*Made with a Graflex, by Herbert L. Douglas;
exposure, $\frac{1}{10}$ sec.; f.4.5*

positions shown in Diagram 2. If placed at position 1 the lighting effect will be the same as is shown in Mr. Douglas' picture. If placed at position 2 the reflector will more uniformly illuminate the face.

The strong light, under the heavy shadow on the cheek, came from the window. This is a cross-lighting effect which can be avoided, if desired, by slightly turning the subject's head, or by

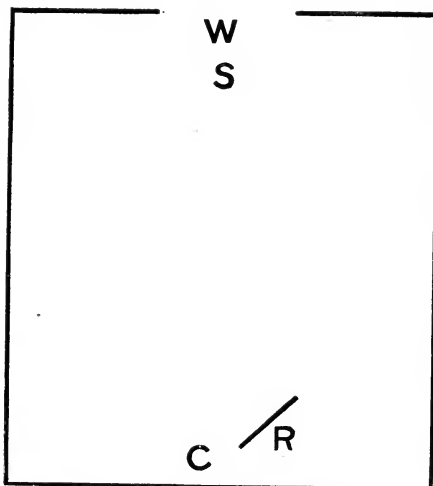


DIAGRAM 3

S—Subject *C*—Camera
W—Window *R*—Reflector

moving the subject nearer the window casing, or to whatever position is necessary for overcoming it. The lighting can always be seen as it will appear in the finished picture by observing the subject from the viewpoint of the lens.

Mr. Cline's picture, on page 8, is a good example of a light toned effect, made by the light from a single window, when that window is also used as the background for the picture.

Mr. Cline's problem was to get light enough on the shadow side of his subject, so that but few shadows would remain. This was solved by placing the camera so close to the subject that the dark area under the window would not be included in the picture, and

then using a bed sheet for a reflector, at the position shown in Diagram 3. Had the sheet been placed in the same relative position on the other side of the camera more light would have reached the front and less the back of the subject's head.

For light toned effects ample exposure is absolutely necessary. Mr. Cline's picture received five times as long an exposure as Mr. Douglas', though the same lens stop was used for both.

When making portraits with window backgrounds the lens must be pointed directly against the light. If the subject is photographed in front of a bay,

in which there are two or more windows, as much as possible of the light that comes from the area that cannot be seen in the finder, and consequently will not be included in the picture, should be prevented from entering the lens. None of this light is used for making the negative and, if it passes through the lens it will degrade the brilliancy of the picture. While all of this light cannot be kept out of the lens a great deal of it can be. The simplest way to do this is with a piece of cardboard, in which lines are scratched or scored so that it can readily be bent into a three sided lens shade. The cardboard should be about 6 inches long and an inch wide, so that when it is bent into the shape mentioned, each of the three sides will be

about 2 inches long by 1 inch wide. This should be held, open side down, so that its front edge is about an inch in front of, and its top an inch above the lens.

If the subject is to be photographed in front of a single window it will not be necessary to shade the lens.

It is, of course, impossible to tell the exact exposures that should be given under all the light conditions that exist in living rooms. The data under our illus-

trations indicate the wide range of exposures that are permissible.

We feel confident that good printing negatives can be obtained, in practically all living rooms, between the hours of 10 and 3 on sunny winter days, with the following as the minimum exposures: $\frac{1}{5}$ of a second with stop *f*4.5, $\frac{1}{2}$ second with stop *f*6.3, one second with stop *f*8 (No. 4 on rectilinear lenses) and 3 seconds with the largest stop on single lenses.



JOE AND JERRY JOIN THE CAMERA OWNING CLASS

JOE and Jerry are about the best known pair of youngsters in their end of town. Never a wave of fun passes through the neighborhood but they are in it somewhere. Most of the time, though, they have to mix up their own excitement, a batch just big enough for two.

Except the summer when they had the goat, the boys have always been well liked. It should be added, however, that everyone was glad when Joe's Uncle Ed sent him a camera for a birthday present. Of course Jerry claimed half ownership since the two held all valuable property in common except the wiggling ears which happened to be Jerry's by birth.

What pleased the neighborhood about the camera was that it is by nature a well-behaved member of society. If one should aim a camera badly it wouldn't

break a window anyway, as Mrs. Eckman, recalling the slingshot era, expressed it to Mrs. Means, who replied that a camera was certainly better than that old accordion for the boys to have.

The first time anyone suspected that a change of habit had descended on Joe and Jerry was one autumn afternoon. Mr. Curtis, the blacksmith, thought they must be sick—hadn't been in to see him all day. That particular afternoon they spent reading a small book called "Picture Taking with the 2C Brownie Camera."

Uncle Ed had said that it was necessary to read the manual before making a single exposure, so the boys sat comparatively still for over an hour and studied it, page by page. But each depended on the other to do the remembering and in the end neither knew all that the manual said.



This would have been the result of making a snapshot of Jerry under a tree

Naturally enough they had to make the first exposure right away. They started whistling for Rex, but Rex didn't appear so Joe finally decreed that Jerry would do almost as well as the dog, and was his second choice for first subject.

Jerry wanted to function still further, however, so he volunteered to watch the instructions to see that Joe did everything just right. Thus the stage was set for the first exposure—a picture of Jerry reading the manual.

"Wait a minute," he warned, looking up from the book just as Joe was about to press the shutter release. "I've got to move."

"You mustn't move," Joe retorted. "You'll have to keep perfectly quiet or you'll spoil it."

"I mean I've got to move before you make the picture," explained Jerry. "Says here that when making instantaneous exposures

the subject should be in the sunlight but the camera must not.* The sun should be back of you, or over your shoulder. If it shines directly into the lens it will fog the picture," he continued, paraphrasing the manual, but looking very learned.

So the boys switched positions, Jerry taking a place in the sun, Joe and his camera hastening to the shade. Jerry found himself squinting, however, so he had to turn his head slightly, which was a great improvement anyway, as it made him look at the manual instead of at the camera.

After Joe had carefully located Jerry in the finder, there came an instant during which the two were quieter than they had been in months. Joe had to be still to keep the camera steady while he pressed the exposure lever, and Jerry had to be still because he

*This applies only to single lens cameras like the box type of Brownies.



The picture Joe obtained by following the instructions in the manual

was getting photographed. If either had moved the picture would have been blurred.

"Do you suppose it will be good?" asked Joe.

"It has to be," Jerry declared. "We did everything according to the book."

And sure enough the picture turned out fine because the boys had followed Uncle Ed's advice. He had said, "The way to get good pictures always is to follow the manual, even if it falls into the river or is eaten by a horse."



THE SURF

Made with a 3A Kodak

WINTER

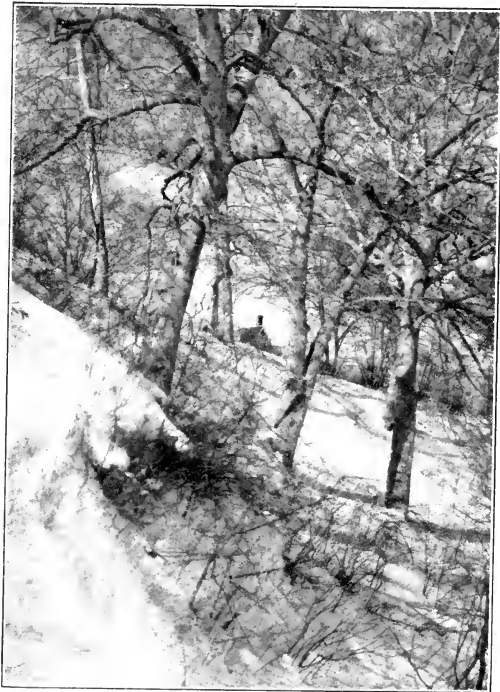
VARIOUS



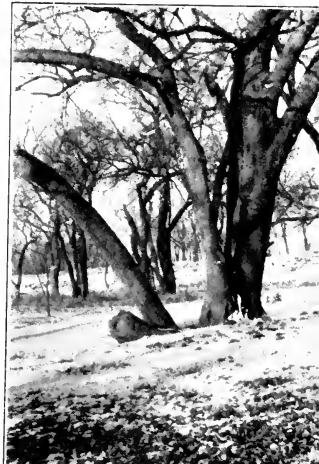
Made with a Premo Jr., by Wells F. Samson



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G. S. Eaton



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Made with a No. 1 Kodak, by
L. F. Hanke

D SUMMER

RA STUDIES
OF CONTRASTING
SEASONS
IN THE OPEN



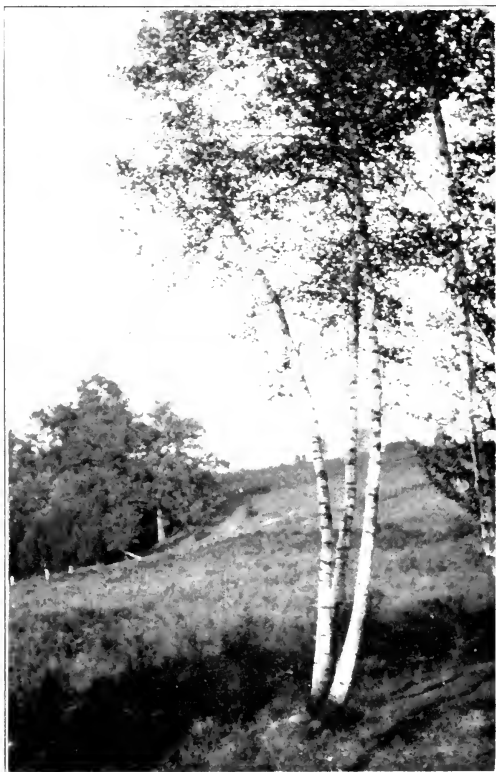
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Made with a Premo, by
Mrs. C. C. Bruero



Made with a Kodak, by
Walter Kidston



Made with a Premo, by C. N. Wolever



Made with a Graflex, by M. W. Reeves

WINTER PASTIMES

To the young folks the call of winter is an invitation to come outdoors. Coasting, skating, skiing, irresistibly appeal to them. It is while they are engaged in some outdoor pastime that youngsters, who are apt to show self-consciousness when a camera is pointed at them, are too busy to pose and, consequently, wear their happiest expressions.

Pictures of children enjoying outdoor winter sports are among the easiest photographs to make. The winter sunshine gives a soft lighting, the animated children are always interesting subjects, and the resulting pictures tell a story that is rich in human interest.

The children need not be told what to do. If they are allowed to play, unmolested by suggestions,



Made with a 3A Kodak, by Mrs. W. W. Leonard



Made with a Graflex, by M. W. Reeves

our only regret will be that we cannot work fast enough for translating every story telling incident into a picture.

The fact that it is so easy to make these photographs should not cause us to forget that in every story telling picture the emphasis must be placed on the story. It is the scene that is being enacted that must be the most obvious thing in the picture.

The importance of this cannot be overestimated. It is splendidly illustrated by the picture on page 18. This tells us that a girl on skates is leading a smaller girl across the ice. It tells us this in the most emphatic way possible, and it tells us nothing more, because there is nothing else in the picture that can succeed in holding our attention.

This point—of making that



Made with a No. 3 Brownie, by S. A. Newcomer

which is of greatest interest the one thing to which the eyes are irresistibly drawn—is emphasized by the illustrations on this and the three preceding pages. Every one of these shows that the photographer laid this emphasis where it should be, and did it in the simplest way possible, that is, by making the picture from a viewpoint which included nothing else

of interest within the field of view.

For skating, coasting and skiing, open spaces are needed, and it is, therefore, always possible to find a viewpoint from which the subjects can be pictured at a considerable distance from obtrusive backgrounds or any prominent nearby objects.

The exposure recommended for sunny days, when the subjects are

stationary, as in the pictures on pages 20 and 21, is an ordinary snapshot, the same as would be given for a summer landscape.

When the subjects are moving directly toward the camera, or diagonally across the field, at a speed not greater than 10 miles per hour a snapshot should be made with a single lens camera. The exposure recommended for a camera that has a rectilinear lens is $\frac{1}{50}$ second with stop No. 4 and for one fitted with an anastigmat lens $\frac{1}{50}$ second with stop *f*.8.

These exposures are recommended only for subjects that are not less than 25 feet from the camera.

For close-up subjects that are moving the largest stop and fastest shutter speed should be used with the Special Kodaks, and the largest stop and a shutter speed of not less than $\frac{1}{110}$ nor more than $\frac{1}{330}$ second when the *f*.45 stop is used on Graflex cameras.

The exposures we have mentioned are not the only ones that will give good results. They are suggested solely because they are known to have proven satisfactory. Photographers who are experienced in this branch of outdoor work may prefer to use other stops or other shutter speeds for the results they wish to secure.



THE SUNLIGHT GILDS THE TEMPLE WALLS
Made with a Kodak, by D. Mennie



THEY'RE COMING

Made with a 2A Brownie, by H. L. Krebs

FERROTYPING GLOSSY VELOX PRINTS

FERROTYPING is the process that imparts a mirror-like surface to photographs that are made on glossy paper. This mirror-like surface, which makes the picture look as though it were covered with a transparent enamel, is obtained by bringing the face of the print, while it is wet, into absolute contact with the waxed surface of a ferrotype plate, and leaving it there until it is thoroughly dry. The ferrotype plate is a piece of smooth sheet iron, one side of which is coated with a heavy enamel.

Before any ferrotype plate is used every particle of dust and all finger marks that may be on it must be washed off with warm water. Dust should not be brushed off as brushing will, in time, injure the enamel.

After the plates have been washed and dried they are coated with a solution made by dissolving 10 grains of paraffine wax in 1 ounce of benzine. The simplest way to apply this coating is by gently swabbing the plates with a tuft of absorbent cotton that is saturated with the solution. The wax coating must cover every part of the plate. If it does not the prints will stick fast to the spots where wax is lacking.

After the benzine has evaporated the plate must be polished with a very soft cloth, preferably with the wooly side of a piece of canton flannel. The polishing must be thorough, because any spots or streaks that can be seen on the plates will show on the prints.

One coating of the waxing



A CLOSE UP PORTRAIT

Enlarged from Vest Pocket Kodak negative, made by Harry Haywood

solution is sufficient for ferrotyping four or five batches of prints, but after each batch has been ferrotyped the plates should be washed with warm water and then polished again before the next batch is put on them. It is not advisable to try to ferrotype more than five batches without rewaxing the plates. The wax gradually wears off, and, after it is off, the prints will stick to the plates.

Glossy Velox prints may, if desired, be ferrotyped immediately after they have been developed, fixed and washed, provided they were fixed for not less than half an hour in a fresh acid fixing bath. If they were fixed for less than half an hour, or in an acid fixing bath that had previously been used, the gelatine surface of the prints may not be hard enough to prevent their sticking to the plates. In

this case they should be allowed to dry. They can then be ferrotyped at any subsequent time. Dry prints must be placed in cold water and left there until they are wet through. When wet through they will be limp, but the gelatine will not be as soft as it was before the prints were dried.

The prepared plates should be splashed with water, or held under the tap for a moment, just before the prints are placed on them. The prints should not be drained after they are taken out of the water but laid directly, face down, on the plates. The best way to do this is by taking a print in both hands, by opposite corners, and bending it slightly so that the middle of the print will first be brought into contact with the plate. The ends should then be gradually lowered, not dropped,



WITH SLEIGH AND SKATES

Made with a 2A Brownie

so that most of the water that is between the print and the plate will move from the centre and pass out at the ends of the print. This method is recommended for preventing air bells, which make dull spots on the prints, from forming between the prints and the plate.

A slight pressure of a finger on the centre of each print will hold it in place as the plate is tilted for draining off the water. The ferrotype plate must now be laid on a piece of plate glass, or on any table top or board that is perfectly level, and the smooth side of a sheet of rubber cloth, or table oilcloth, laid on the prints. They are now ready to be brought into absolute contact with the plate. This is done by pressing firmly on a rubber print roller as it is run across the cloth. The roller should be run in one direction only. If it is run backward and forward any air bells that may have formed might merely be moved back and forth, instead of being driven out from underneath the prints.

If any raised spots can be seen on the backs of the prints after the cloth is lifted they must be removed with the roller. Such spots indicate the presence of large air bells.

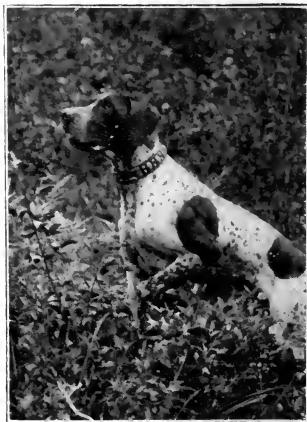
The plates, with prints attached, should now be placed in a current of air. As all the moisture that is in them must escape through the back of the paper the drying will, necessarily, be slower than if both sides were exposed to the air. The drying should never be hastened by placing the plates in warm sunshine, or near a stove or radiator, for the reason that the gelatine surface of the prints will soften

and stick fast to the plates if they become too warm.

When the prints are thoroughly dry they should leave the plates readily if they are lifted by one corner. It is useless to try to remove prints before they are dry clear through. It cannot be done without injuring them.

The high gloss that ferrotyping produces is the result of making the surface of the prints perfectly smooth. As it is impossible to make a matte, a semi-matte or a rough surface perfectly smooth by ferrotyping it is evident that the only prints that can be successfully ferrotyped are those that are made on glossy paper.

Ferrotypes are supplied by Kodak dealers in 10 x 14 and 18 x 24 sizes. The 10 x 14 size can be obtained in both light and heavy weights. The larger size is furnished in heavy weight only.



ATTENTION
Made with a 3A Kodak,
by Al. Rosentretzy



HITTING THE GRADE

Made with a 3A Special Kodak, by Al. M. Tupering

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THE manual that accompanies every hand camera that is sold by the Canadian Kodak Co., Limited explains, in detail, how to use the particular size and model of camera to which it applies.

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No matter how many cameras you have used, be sure to read the manual that accompanies any other camera you may obtain. By so doing you can learn, in a few minutes, what you might otherwise have to learn from experience.

Always keep the manual so that it will be available for reference at any time.

Should you encounter any problems in your photographic work that you cannot readily solve submit them to us. We will be glad to assist you. There will be no charge.



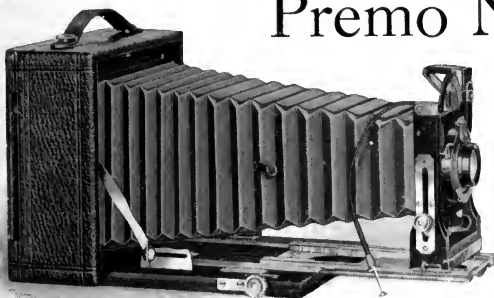
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This freedom from guesswork distinguishes Graflex photography and is valuable to both novice and expert.

Graflex catalogue by mail or at dealers'

Canadian Kodak Co., Limited

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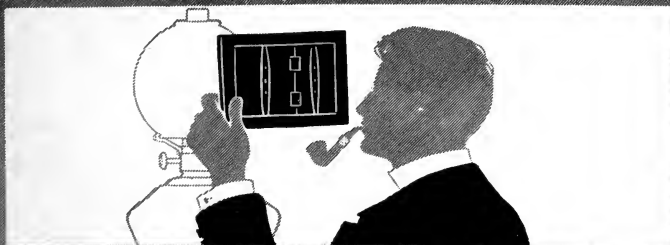
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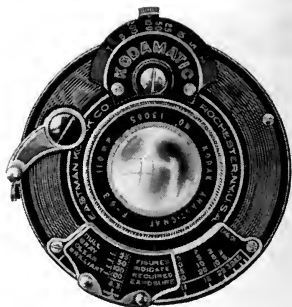
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APRIL 1923

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Eastman Printing Masks

THESE orange-red Printing Masks, made of transparent Kodaloid, are furnished in two styles, with and without guide. The Masks with guide provide a means of trimming to obtain an accurate and parallel white border $\frac{1}{8}$ in. in width all around the picture.

The Masks without guide permit making prints with wide white margins.

These Masks are supplied to fit the regular printing frames and with openings of various sizes for all standard negatives.

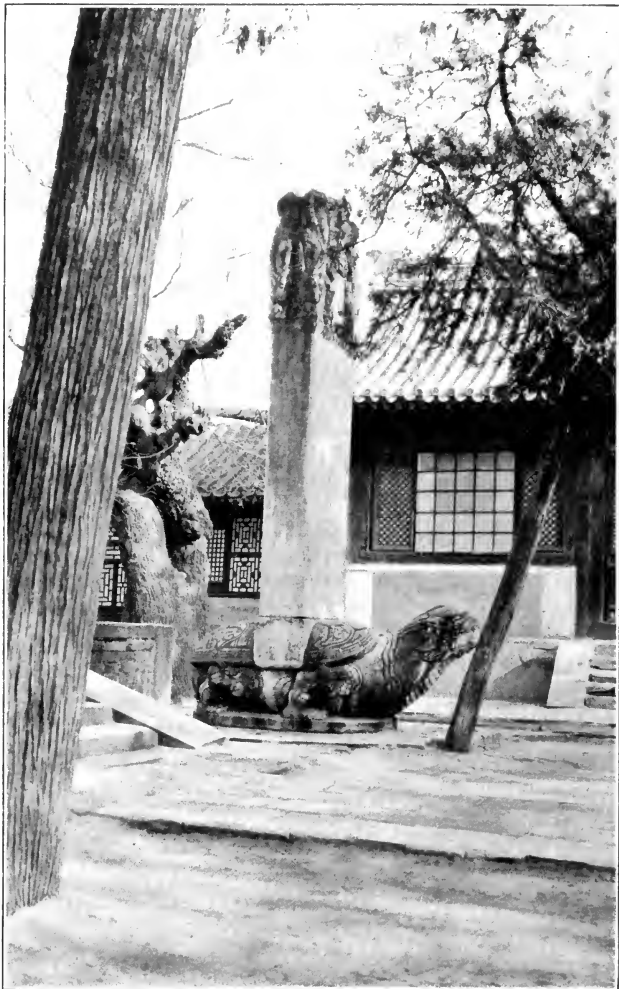
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IN THE GROUNDS OF A TEMPLE, PEKIN, CHINA
Made with a 3A Special Kodak, by M. E. French

KODAKERY

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VOL. X

APRIL, 1923

No. 6



Made with a Graflex, by O. K. Nunome. Sun behind Camera

WHEN THE ICE GOES OUT

DURING the big thaw, which is apt to occur at any time after midwinter, the snow and the surface of the ice become honeycombed, and by the time the

ice breaks and moves down stream multitudes of glistening spots are reflected from every floating cake.

On a sunny day these spots are the brightest things we can see on



Made with a Graflex, by O. K. Nunome. Sun in front of Camera

the water and, as they are bordered with halftones and shadows, some of which are very distinct while others are faint, they can be utilized for adding pictorial interest to river and harbor scenes.

The pictorial value of these light spots depends on their being in contrast with darker tones, and these darker tones, the halftones and the shadows, on the ice and on the water, can always best be seen by looking over the water toward the sun. It is, therefore, from such a viewpoint that the most striking lighting effects can be obtained.

When such a viewpoint is not available good results can also be secured by selecting a viewpoint

from which the water looks dark, even though the picture is made with the sun behind instead of in front of the camera, as was the case when Mr. Nunome's picture on page 3 was made.

If the pictures are made with the sun in front of the camera, a hand, or a notebook, or anything else that is suitable, must be held about an inch above and slightly in front of the lens, in such a position that it will cast a shadow on the lens. If the lens is not shaded the negative will be fogged.

In this kind of work we must expose for the highlights instead of for the shadows. When this is done a blue or a gray sky will

photograph gray without using a filter and, if the pictures are made with the sun in front of the camera, the strongest lights that are in them will be the bright spots on the ice, as shown by Mr. Nunome's picture on page 4.

The exposures recommended are, $\frac{1}{330}$ second with stop *f*.8 on a Graflex, $\frac{1}{100}$ second with stop 16 on all other cameras that have

anastigmat or rectilinear lenses, and a snapshot with the third stop on single lens cameras.

It is important that the negatives should be fully developed—not less than 20 minutes if one tank powder is used in a Kodak roll film tank or a Film Pack Tank, when the temperature of the developer is 65 degrees Fahrenheit.



IN A CORNER
OF HOLLAND

Made with a
3A Kodak Jr.

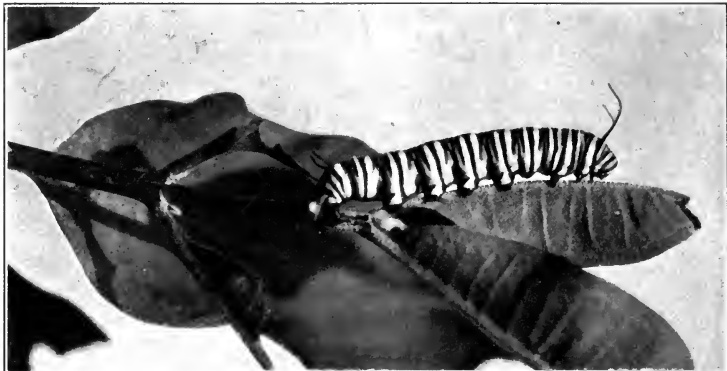


FIG. 1—Full Grown Larva or Caterpillar

FROM CATERPILLAR TO BUTTERFLY

BY W. L. BROWNELL

Illustrated by the Author

PERHAPS one of the most wonderful of all the miracles that Mother Nature performs is the change, or metamorphosis, of the caterpillar into the butterfly or moth. It is hard for one to realize when looking at a more or less ugly specimen of a crawling caterpillar that a few short weeks, or months at the most, will see it changed into a beautiful winged creature bearing no resemblance to its original form.

While the metamorphosis of an insect can not always be easily followed by the human eye, because with many butterflies and moths the process occupies several months, yet it can readily be observed in the case of the monarch—the common Milkweed Butterfly, which produces several broods in a season and completes its entire change in about three weeks.

To obtain photographs of the various stages in this process is comparatively easy and the results are well worth preserving. Moreover, to one who has never witnessed the process, it is absorbingly interesting.

The first consideration is, of course, to find the little larva, or caterpillar, that is to be your guest for two or three weeks. This is not a difficult task and you will not have to hunt long among the milkweeds before you will discover one, for they are very common. You will find that he is rather a handsome little fellow. Something more than two inches in length when fully grown and ornamented with alternate transverse bands of yellow, black, and white. (Fig.1.) Take him home when found. He can be handled with impunity.



FIG. 2—*Larva Hung for Pupating*



FIG. 3—*Chrysalid Half Way Out*

Also take with him a stalk of the plant upon which he was found. Place the stalk in a bottle or vase of water and allow your captive to roam at will on it. You will find that, so long as you keep him supplied with fresh leaves, he will not try to escape. In this stage you can photograph him as often as you please. He is a very easy subject, remaining quiet enough for even a time exposure.

Some morning before long, however, when you visit him you will find him uneasily roaming the plant with no apparent desire for food. This is a sure sign that his life as a caterpillar is nearly over and that he is searching for some suitable place in which to pass into

the next stage of his existence. He will soon choose the spot which is, almost invariably, upon the midrib on the underside of some leaf. (Fig. 2.) To this he will attach himself by his tail with a silky, viscid substance. Here he will hang, in the form of a hook, for about twenty-four hours, but when you see his body begin to straighten out you must prepare for speedy action for the next stage of the change is accomplished with considerable rapidity. He should be moved into sunlight to enable you to make instantaneous exposures and, as you may wish to make several pictures of this stage of the metamorphosis, it will be best to place the camera on a tripod and focus accurately



FIG. 4—*Perfect Chrysalid*

upon him. Now watch him closely. Soon his body will begin to twitch and wiggle, the head and that portion just back of it swelling until the skin, given more pressure from within than it can stand, suddenly splits just back of the head and the chrysalid commences to emerge. The skin is worked backward by continued convulsive movements until it is gathered in a compact bunch at the tail, (Fig. 3) the entire operation occupying not more than two or three minutes. Now, while he still retains a hold upon this bunch of skin, the tail is withdrawn armed with a minute black hook, which is worked into the silky substance until a firm hold is established when the skin, with one last convulsive movement, is entirely rejected.

The chrysalid slowly changes its shape and we should make at least two negatives at different stages of this change. When it is complete it is really a very beautiful little, living jewel that hangs from the milkweed leaf. (Fig. 4.) In fact, it is often called the Milkweed Jewel. About an inch in length, in color bright green and ornamented with golden spots, reproduced in precious metal, it would make a wonderful pendant for milady's throat.

For the next week he is quiescent but when the color of the chrysalid begins to change to brown and the shell become transparent, so that the markings upon the wings of the captive butterfly can be plainly seen, you must again move him into the sunlight and once more prepare for rapid work. You must watch closely else you will miss the next move for, with no further warning, the shell suddenly bursts open and the new-born butterfly, with surprising rapidity, releases himself, and hangs suspended from the empty chrysalid shell, a wet and bedraggled looking object. (Fig. 5.) To the uninitiated it must seem as though a malformed specimen had emerged. Slowly, however, the wings expand and the body contracts as the juices that are contained in the latter are pumped into the former until he finally hangs, his wings still damp and limp, entirely unfit for use, but fully expanded and beautiful in the pristine glory of their color.

Presently he will leave the now despised empty chrysalid shell and will crawl to the top of the plant where he will spend the next few

hours slowly opening and shutting his wings in order to dry them out and strengthen them, fitting them to carry him out into the world. (Fig. 6.) When they are thoroughly dried he will essay his first journey, which is usually a short one, to some nearby plant or shrub. Here he will rest until he has gained sufficient confidence to finally launch himself upon his short life of usefulness and pleasure, for he is one of Nature's links in the interdependent life of the universe.

The caterpillars may be found at any time during the summer from the time that the first milkweed appears until frost. In fact,



FIG. 5—Wings Nearly Expanded



FIG. 6—Drying Wings—Perfect Insect

all of the last generation are killed by the first frost, and the continuation of the species depends entirely upon those mature insects that migrate south in the fall to return again in the spring and take up their parental duties.

In this work I would advise that all the pictures be made with the subject in direct sunlight. The exposure should be about $\frac{1}{25}$ of a second with stop 8 on rectilinear lenses; with anastigmat lenses use stop *f.11*; with single lens cameras make an ordinary snapshot exposure. Any camera is suitable for the work. By using a Kodak Portrait Attachment the largest images the camera can make can be obtained.



*Wide white margin obtained by printing with
Eastman Printing Mask without guide*

THE MARGIN OF THE PRINT

No picture looks really finished unless it is surrounded by a border of some sort. The border may be a frame, it may be a card on which the picture is mounted, or it may consist of a white or colored margin surrounding the picture area.

The most popular method, and the one followed by commercial printers and the large majority of amateur photographers who make their own prints, is the neat white margin surrounding the picture. These margins are obtained by printing the negative through an opening in a mask of opaque paper, Kodaloid or thin metal.

While suitable masks may be cut by hand, all who have made them realize the difficulty of cutting them so that the lines will meet at the corners to form perfect right angles.

The instructions tell us to procure a sharp knife, a ruler and a solid level surface, such as a table, to do the cutting on. The fact that considerable skill is also necessary is ignored. Nor do they warn regarding the care that is required if the dining table be used.

The lady who presides over our household affairs sometimes attempts to reduce the egotism



Illustrating the effect of Embossing

which contemplation of an otherwise blameless record brings on, by pointing out a scratch in the top of the dining table, the result of a mask cutting experiment of many years ago, before the advent of the Eastman Printing Mask.

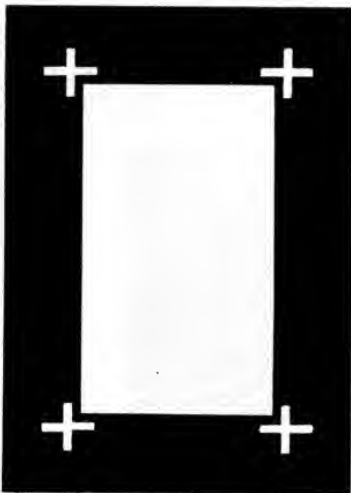
Nowadays we avoid our difficulties and the risk of family friction by choosing an Eastman Printing Mask of the required size. With this we can proceed with the full assurance that our pictures will have clean, neat, white margins, with absolutely square corners and no ragged edges to mar their appearance.

The Eastman Printing Masks are made of Kodaloid, a substance which is flexible, transparent and non-actinic. They are made in two

styles—with and without trimming guide.

This mask is placed over the negative in the printing frame and the negative so adjusted that the part we wish to print from will show through the opening. As the mask is non-actinic, the margins of the paper covered by it are protected from exposure and will be white after the print has been developed. By this method and using the mask without guide, we can make prints having white margins of any width desired.

The trimming guide takes the form of a cross or L shaped opening in the mask. The light which passes through this opening on exposure leaves an absolutely black fac-simile of the opening on the



Eastman Printing Mask with Guide

developed print. These marks provide a means of trimming the print to obtain an accurate and parallel white border one-eighth of an inch in width all around the picture.

The appearance of the picture may often be greatly improved by printing it with broad instead of with narrow white margins and then embossing the margins so that the embossing lines will form a border closely surrounding the picture area.

This treatment of the print is particularly effective for pictures made with Royal Velox or Royal Bromide. Redeveloped, these papers yield rich sepia toned prints, which, treated in the manner described, will make wonderfully charming pictures, reminiscent in many cases of fine old etchings.

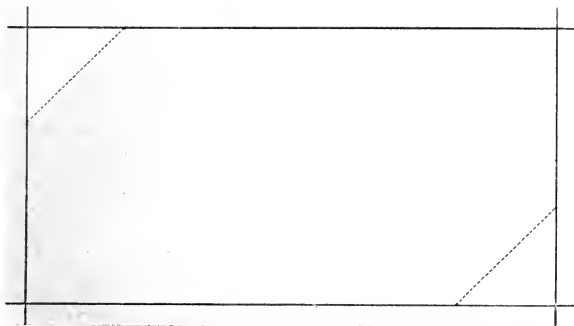
But we can almost hear you say,

"I have no embossing press." True, maybe, but almost within reach of your hand are all the necessary tools to produce the embossed effect.

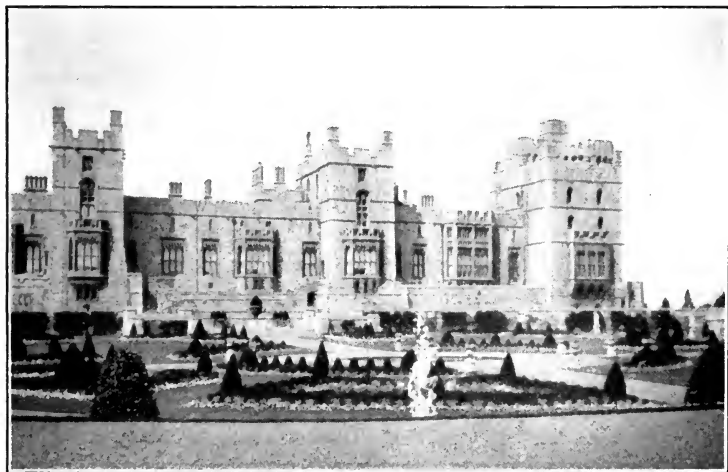
The method is simple and the only equipment needed consists of a sheet of glass, a piece of cardboard and an embossing tool. Any available implement having a rounded end, like the handle of a silver table knife or the end of a tooth brush, will answer as an embossing tool.

If we wish to place the embossing lines $\frac{1}{8}$ of an inch from the picture, we must first rule the exact size of the picture area on a sheet of cardboard, then, after the card is trimmed so the ruled lines will be $\frac{1}{8}$ of an inch from each of its four sides, an opening should be cut, near two of the corners of the card, along the ruled lines, as shown in our illustration. The card is then placed on a sheet of glass and the print laid over it, face down and so adjusted that three marginal lines of the picture will show through the openings in the card, exactly on a line with the lines that are ruled on the card. This adjustment can most easily be made by holding the glass up to the light and looking through the back of the print. The embossing is done by pressing the end of the embossing tool against the back of the print and running it around the four sides, in contact with the edges of the card.

The operation takes much longer to describe than to perform, and we are quite sure that after a trial you will be delighted with the results.



*Black Lines on Embossing Card exactly enclose Picture Area.
Space on Card outside Black Lines determines
width of space between Picture
Area and Embossing
Lines*



THE CASTLE WINDSOR, ENGLAND—Made with a 3A Kodak



Made with a Graflex, by M. W. Reeves

THE SUNLIGHT ON THE FLOOR

THE patches of sunlight that make bright spots on the floors of our living rooms will appeal to us in a way they never did before when we realize that they are of value for picture making. As subject matter for a picture they are far from interesting, but as foregrounds for story telling pictures they are superb.

Mr. Reeves, who delights in making easy work of seemingly difficult things in photography, points the way for utilizing these patches of sunlight. His story telling picture, shown above, suggests what can be done in almost any living room.

The light that wrote this story on the film came through the window that is recorded in the picture. This light reached the subject at an angle of about 45 degrees—the ideal angle for making the image of a spherical object, like the human head, show “roundness” in a photograph.

If the sunlight does not reach the floor at about a 45 degree angle, between the hours of 9 and 3, it will be because the bottom of the window is too near the floor. In such a case a single thickness of a bed sheet, or cheesecloth, or muslin should be fastened across the lower part of the window.

The light that comes through the cloth will not only be subdued, but it will also be diffused, so that it will help to illuminate the walls and those parts of the floor that the sun's rays do not reach. If the bottom of the window is more than 18 inches from the floor it may not be necessary to block off any part of it.

Detail can always be recorded in such a dark area as is shown in front of the child in Mr. Reeves' picture, by merely placing a large white reflector (a bed sheet is excellent) in a position that will make it reflect the light from the window into the dark area. This reflector can be supported on sticks tied to chairs. It must, of course, be so placed that it cannot be seen in the finder, or it will show in the picture.

The way to determine the position from which the reflector will most satisfactorily illuminate the shadows is by moving it from place to place and observing the effect it produces. It should not be too near the window, never nearer than say, six feet, and it should, when practicable, be so placed that it will reflect light to the shadow side of the subject, as well as to wall and floor. A suggested position is shown in the diagram.

Though the subject is to be photographed in a patch of sunlight on the floor, it should be re-

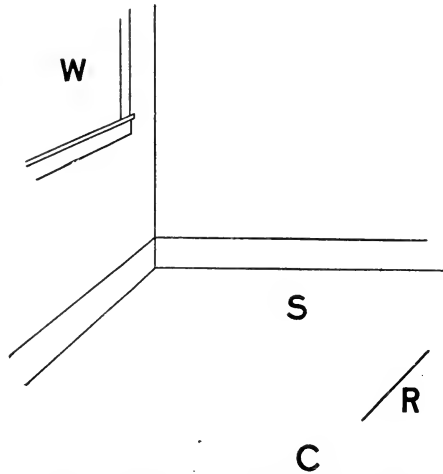


Diagram showing the plan by which picture on opposite page was made

W—Window	R—Reflector
S—Subject	C—Camera

membered that the brilliancy of sunlight indoors is not nearly as great as it is out under the open sky. Window glass absorbs some of the light and, in our living rooms, there is no strong reflected light coming from all points of the compass to supplement the direct rays of the sun. It is, therefore, necessary to give an ample exposure. The minimum exposures we recommend are as follows:

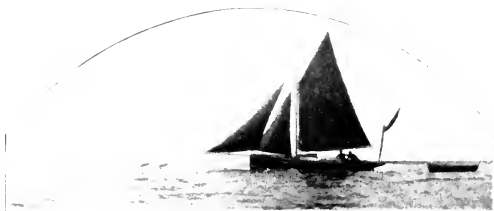
With the $f.4.5$ stop on a Graflex $\frac{1}{2}$ second. With the $f.6.3$ stop on the Special Kodaks and Premos $\frac{1}{2}$ second. With the No. 4 stop on cameras that have rectilinear lenses 1 second, and, with the largest stop on single lens cameras (these have no lens in front of the shutter) 2 seconds.

REMINDEERS OF



HER SEASONS

AS RECORDED BY
THE KODAK





The result of picturing a white subject against a background that photographs white

JOE AND JERRY CONSIDER CONTRASTS

PUT your feet in there," said Joe's mother as she opened the oven door. "You'd better stay here for supper, Jerry. I wonder if there'll ever be a Saturday cold enough to keep you boys inside for a minute."

"A cold day couldn't drive us in but a warm one might," Joe asserted. "If it melted the ice and the snow so we couldn't skate or coast or anything there'd be nothing to go outdoors for."

"Wonder if it was the weather that kept the snow shoe rabbits in today," said Jerry. "We didn't see a single one."

"They're hard to find anyway because it's so easy for them to hide. That's why they have white coats in winter. They don't show up against the snow," explained Joe. "If they wore the same fur in

winter as in summer you could see them a mile away. They'd never be safe from hunters. These rabbits wear colors that blend with the landscape instead of contrasting with it."

"That's a good point for us to remember when we make pictures with the Brownie. Our subjects never ought to blend with the landscape, like rabbits—they ought to be just the opposite," suggested Jerry. "Instead of blending with the background they should contrast with it. When we photograph anything that's dark we ought to stick it up against a light background. And if the subject is light the background should be dark. Then the thing that is important will be easy to see in the print because it will stand out from its surroundings."



The result of picturing a white subject against a dark background

"Do you remember that picture we made of 'Whitey' on top of the hill?" Jerry asked. "Can't hardly find the top of the dog's back in the picture, because there wasn't enough contrast between it and the sky. We got a much better picture the time we posed him in front of the bushes. You can't miss old 'Whitey' in that one."

"We had the right hunch on that coasting picture, though. Showed you against the sky. It was a bright sky."

"Well I'm a bright boy, too." retorted Jerry.

"Your sweater is dark, though, so the contrast was there just the same."

At that moment the telephone interrupted. Joe's mother turned to the boys and said, "It's your father, Jerry. He wants to know if you're here."

"Tell him I've just left for home," Jerry answered.

"Well, I declare," said Joe's mother. "If it isn't born in them." But she explained over the 'phone that Jerry was staying for supper.

Brown gravy contrasted against creamy white potatoes is a beautiful sight. And its beauty was more than skin deep within a few minutes after Joe and Jerry got their napkins unfolded.



THE EXPIRATION DATE

LETTERS are constantly being received from readers, asking when their KODAKERY subscription expires.

The expiration date is shown by letter, indicating the month, on the envelope, near the address. For instance, A means January and D April.



THE PONT NEUF, PARIS, IN WINTER—*Made with a 3A Kodak*

PHOTOGRAPHING SPRING LANDSCAPES

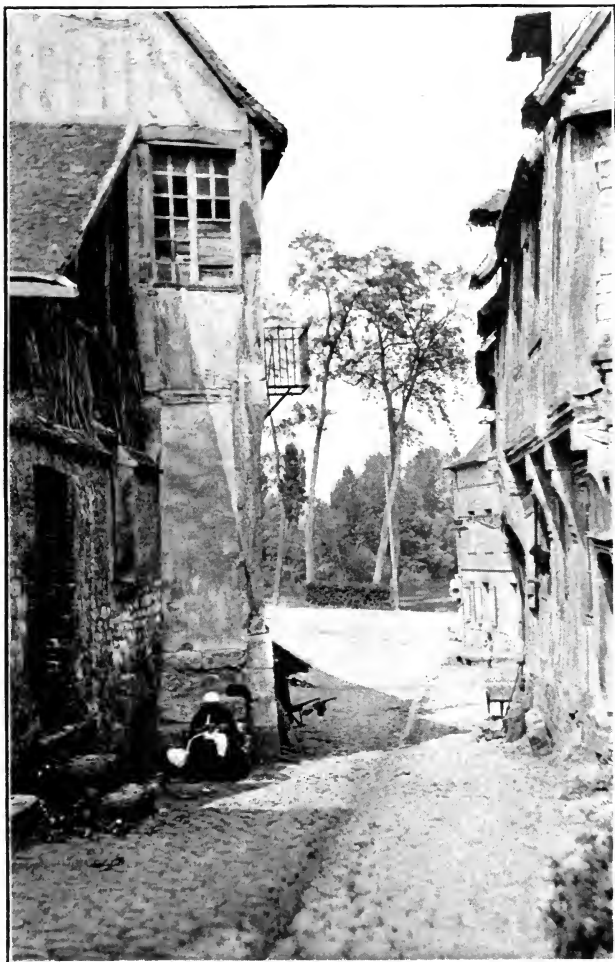
MANY of Nature's most interesting studies present difficulties to the amateur photographer, for the reason that Nature, in some seasons and in certain of her moods, is rich in those light rays which strongly affect the eye but weak in those actinic rays which will record themselves on the film. Early spring perhaps presents this problem more than any other season of the year.

Nature is never more beautiful than just at this time. The brilliant green of new foliage gives a freshness and brightness to the landscape which is not present at other seasons. As spring advances and merges into summer, most of the leaves assume a deeper color which is maintained until they commence to turn brown in the fall.

Landscape pictures which include any considerable amount of spring foliage, if made in the ordinary way, will reproduce this foliage in too dark a tone, because the light reflected from the young leaves and twigs, though bright to the eye, is weak in actinic rays.

As we cannot alter the character of this light, we must, to obtain proper rendering of the picture, find some means to slow up or hold back the more actinic light, which is reflected from other parts of the subject, until the less active light rays have been given an opportunity to record themselves.

It is for this purpose that the Kodak Color Filter was designed. Eastman film being orthochromatic, is sensitive to green so that by filtering out and greatly subduing the strongly active blue and violet rays by means of the filter,



STREET SCENE—LA BOUILLE, NORMANDY
Made with a 3A Kodak

we can, with sufficient exposure, obtain good printing density in those parts of our film which would otherwise have been almost unacted upon.

The use of the Kodak Color Filter presents no difficulties. It is readily slipped into position over the regular camera lens, but obviously the exposure with the filter must be of longer duration for, having cut off practically all the ultra violet light and a portion of the blue and violet, we must expose for those rays which have a comparatively weak action on the sensitive emulsion. For ordi-

nary landscapes an exposure ten times as long as would be needed without the filter should be given. Thus, if $\frac{1}{50}$ of a second is correct without the filter, give $\frac{1}{5}$ of a second when the filter is used.

It is important when using a filter to bear in mind that exposures of longer duration than $\frac{1}{25}$ of a second should not be attempted when holding the camera in the hand. To do so will result in failure due to the movement of the camera during exposure. For the longer exposures always use a tripod or similar firm support for the camera.



OLD WATER MILL, FRENCH PYRENEES .

Made with a 3A Kodak



FRENCH RIVIERA, NEAR ST. MARTIN
Made with a 3A Kodak



PANORAMA OF ROME, ITALY, WITH STATUE OF VICTOR EMANUEL
Made with a 3A Kodak



VILLAGE AND VINEYARDS, LAKE GENEVA, SWITZERLAND
Made with a 3A Kodak

EFFECT OF TEMPERATURE ON DEVELOPMENT

MANY more under-developed negatives are sent to KODAKERY for criticism in the cold than in the hot months. This is doubtless due to the fact that the water used for mixing the developer is colder in spring and fall and winter than in summer. Since a cold developer works more slowly than a warm one it will take longer to develop a film or plate at 55 degrees than at 65 degrees Fahrenheit.

Unless we know the temperature of the developer we are using we cannot be sure of obtaining correctly developed negatives. This statement applies to both the tank and the tray methods of development.

Tank development is based on the action of a developer of a given strength, for a given length of time, at a given temperature. Since in tank development we do not examine the negatives during development, we *must* know the temperature of the developer or we cannot know when to stop development. The length of time to develop in the tank, at all temperatures between 45 and 70 degrees F. is stated in the instructions that are furnished with every Kodak roll film or film pack tank.

When we develop our negatives in a tray, and judge when to stop development by examining them before the dark room light, we cannot certainly tell when they

are correctly developed unless the developer is always used at the same temperature, because a cold developer produces an image whose apparent density, when examined before the dark room light, is greater than the printing density of the finished negative. On the other hand, a warm developer produces an image whose apparent density before the dark room light is less than its printing density. The result is that even if we make no mistake in judging the apparent density during development, our tray-developed negatives are apt to be under-developed in cold

weather and are equally apt to be over-developed in hot weather, unless we always use the developer at the same temperature.

Testing the temperature of water by dipping a finger in it is pure guess work. A wet finger does not tell the temperature. It only tells how the water feels, and water at 65 degrees may feel warm in winter and cool in summer. The only way temperature can be accurately determined is by testing it with an accurate thermometer.

Eastman thermometers are made especially for photographic work and they are accurate.



HOME FLOWERS

Made with a Kodak, by Edith S. Watson

SPOTTING NEGATIVES AND PRINTS

IT may occasionally happen, no matter how careful we are, that a speck of dust will get inside the camera, where it is apt to lodge on the film and make what is known as a pinhole, that is, a transparent spot in the negative. Dust may also find its way to a negative while it is being printed and make white spots on the print. These spots can easily be removed from both negatives and prints with a bit of pigment from a packet of Eastman Spotting Colors.

Spotting a print is such a simple matter that anyone can do it. A bit of pigment is taken up on the moistened tip of a spotting brush and applied to the spot that is to be removed from the print. If too much pigment is used it can be taken off the print with a small tuft of damp cotton, and a lesser quantity applied.

In spotting negatives we must match the tone that surrounds the spot. If too little pigment is used the spot will print too dark and if too much is used it will print too light. To be sure of getting the tone just right the negative must be placed on a sheet of glass—ground glass is the most satisfactory—and the glass held in front of the light so the light will pass through the negative, as it is only by looking through a negative that we can see the depth of the tone that is to be matched.

In order to make the spot match its surroundings and thus become invisible, we must apply just the right amount of color, and to be

sure of doing this a little pigment should be taken up on the tip of the spotting brush and first applied to one of the transparent edges of the negative that is outside the picture area. The pigment must not be wet enough to run freely from the brush but only moist enough so that it can be readily transferred from the brush to the negative. If the brush makes a deep black mark it holds too much pigment. In this case enough of the color should be removed by gently rubbing the brush on a sheet of paper until the mark it makes is a pale black. It is better to use too little than too much color, for if one application fails to make the spot as dark as its surroundings more color can be applied.

With a little practice anyone can spot negatives as well as prints, so no trace of the work can be seen.

The size of spotting brush to use depends on the area of the spot that is to be filled in. A No. 3 brush is suitable for most of the work that is to be done, while for very small spots a No. 2 can be used.

A packet of Eastman Spotting Colors contains black, sepia and white pigments.

White is used for removing dark spots from prints on white paper, sepia is for spotting sepia prints and for blending with black for matching very dark sepia or warm black tones, while black can be applied so as to perfectly match both gray and black tones.



FAIR WEATHER
Made with a 3A Kodak

SERVICE DEPARTMENT TALKS

DEVELOPING PRINTS IN COLD WEATHER

THE temperature of developers in which prints are developed should be kept at about 70 degrees Fahrenheit.

If the developer is too cold it will work so slowly that the prints may become fogged before they are fully developed.

If the temperature of the room is say, 50° F. and the developer is made up with water that has been heated to 70° F. it will, in a short time, become as cold as the room.

By keeping the temperature of the room right (70° F.) the temperature of the developer will remain right during the entire time that prints are being made.



*For any photographic information that you
desire, address*

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

Now effective—lower prices on



Graflex Cameras

FOR example, the Auto Graflex Junior with Kodak Anastigmat lens *f*.4.5 is now \$62.50; other models also show marked reductions.

You can therefore have Graflex advantages—the use of the reflecting mirror, focal plane shutter, *f*.4.5 lens—at a considerably lower cost than heretofore. And Graflex advantages are evident every time an exposure is made.

Ask your dealer, or write us, for Graflex catalogue

Canadian Kodak Co., Limited

Toronto, Canada

Safe Illumination for the Amateur's Dark Room

KODAK and Brownie Safelights give sufficiently strong illumination, yet keep the room safe for handling films, plates and papers and thus help you to better results in your dark room. These lamps are supplied with a Series I Safelight for use with films or plates not highly color sensitive but others can be substituted for more advanced work.



The Kodak Safelight Lamp

Brown enameled metal, inside white to intensify light. Price complete, except for electric bulb . . . \$4.00
 Extra Safelights (any series); size 5 x 7, each \$1.00

The Brownie Safelight Lamp

Japanned metal, safelights in end and side. Screws into light socket and takes 15-watt Mazda Lamp. Price complete, except for electric bulb \$1.75



Extra Circular End Safelight (any series), each . . . \$0.30
 Extra Side Safelight (any series), each 50

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TORONTO, CANADA

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And then for tall subjects—



Premo No. 9

THE back reverses so that upright subjects utilize the long dimension of the film. The front rises to decrease foreground and increase sky. And when it is necessary to point the camera upward to include the desired view, the bed swings, so that vertical lines in the subject remain vertical in the picture.

SIZES: 3¼ x 5½, 4 x 5, 5 x 7.

LENSES: Convertible Planatograph on all sizes, Kodak Anastigmat *f.7.7* or *f.6.3* on 3¼ x 5½ and 4 x 5, B. & L. Kodak Anastigmat *f.6.3* on 5 x 7.

SHUTTERS: Kodak Ball Bearing or Ilex on all sizes, Optimo on 5 x 7.

PRICES: \$40 to \$105 including case and holder.

Premo catalogue by mail or at dealers'

Canadian Kodak Co., Limited

Toronto, Canada

KODAK CUT FILM

Regular and Super Speed

NON-HALATION, long scale of gradation, wide latitude and fine grain—these advantages give Kodak Cut Film negatives the quality that makes them valuable. Add pictorial interest and beauty and you have a negative you will want to keep for the future.

As Kodak Cut Film negatives are thin, flexible and unbreakable they can be stored in a small amount of space without danger of breaking—another advantage over plates.

Eastman Film Negative Albums



Each Cut Film can be kept in a separate numbered pocket so it can easily be found by the index, where space is also provided for the title and other desired data about each negative. This gives safe, convenient storage, and a complete record of your work.

Each album accommodates up to 100 negatives.

PRICES

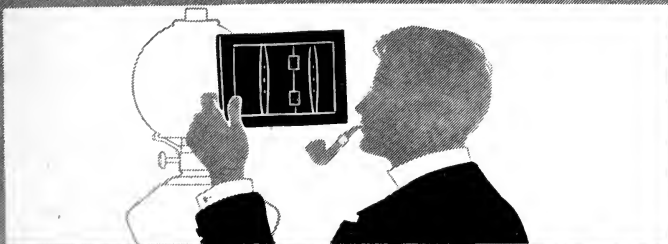
Eastman Film Negative Albums

2½ x 4¼ or smaller	\$1.00	3¼ x 5½ or smaller	\$1.25
3¼ x 4¼, 4 x 5 or smaller	1.25	5 x 7 or smaller	1.75

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Prints by Gaslight

*A negative is judged by the
print it will make*

VELOX

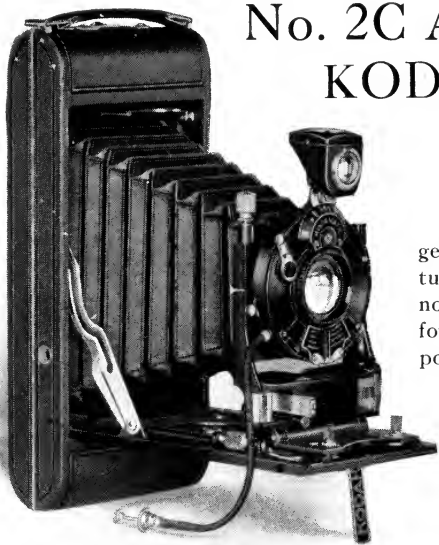
increases the value of your negatives by
the additional quality it gives
to the prints.

CANADIAN KODAK CO., LIMITED
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Announcing a new Kodak

No. 2C Autographic KODAK *Special*



Enthusiasm genuine and general greeted the 2C picture— $2\frac{7}{8} \times 4\frac{7}{8}$ inches, and now comes the 2C *Special* for superior pictures in this popular size.

THE photographic refinements of the No. 2C *Special* are so complete that virtually every aid to results is conspicuously present. Kodak Range Finder helps you determine the exact focus, Kodak Anastigmat *f.6.3* is the famous "lens for better pictures," the seven speed Kodamatic shutter is noted for accuracy and the sliding exposure scale automatically indicates the proper time to allow for each stop opening.

Pictures brilliant, sparkling, microscopically sharp logically result when you press the release on the No. 2C *Special*.

Price, \$65

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



MAY 1923



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

Kodak Auto-Focus Enlarger

WHILE the self-focusing feature of this camera converts enlarging to a simple printing process, its convenience for vignetting is an emphatic advantage as well.



Just hold the vignetter horizontally and you see in the image, projected downward on the table top, exactly what will be included in the finished picture.

Kodak Auto-Focus Enlarger accommodates film or plate negatives up to 4 x 6 inches and makes prints on Bromide paper up to 14 x 21 inches. Price complete, save for the 60-Watt Mazda lamp required for illumination, . . . \$40.00
Diffusing Disc for soft focus effects . . . 1.00

Eastman Mask Charts

afford the simplest means of obtaining an accurate mask, any rectangular size, for use when enlarging any part of a negative with the Auto-Focus Enlarger.

Price, 5 x 7 size, per dozen charts \$0.15

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At your dealer's

With Kodak Ease

ON the marble topped, black walnut table that used to stand in grandmother's "best room" there was once a basket of Stereo pictures and a stereoscope, and alongside them a cluster of wax flowers under a glass bell.

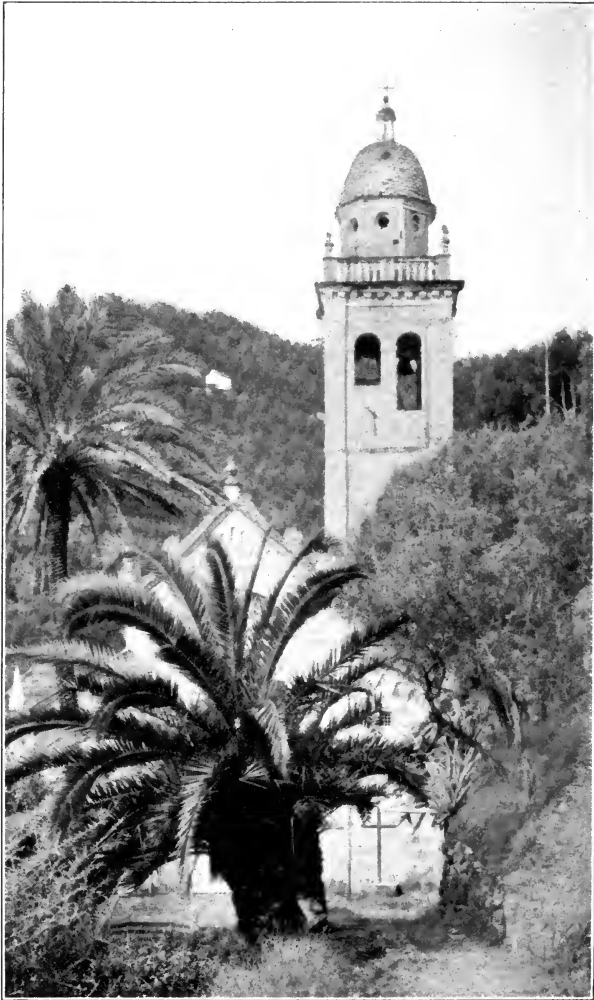
And how realistic those pictures were! As viewed through the twin lenses they had not merely width and height—but depth as well. All Europe and Niagara Falls were in that basket.

Today you can make the same sort of pictures of the things that *you* are interested in, and make them with Kodak ease—with a Stereo Kodak.

At your dealer's

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At your dealer's



PORTO FINO, ITALIAN RIVIERA
Made with a 3A Kodak



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES 5 CENTS

VOL. X

MAY, 1923

No. 7



NUMBER 1

Exposure
 $\frac{1}{25}$ second, *f.5.6*

AN ADVENTURE WITH A FEATHERED SUBMARINE

BY HOWARD TAYLOR MIDDLETON

Illustrated with Graflex Pictures by the Author

IT was a bleak, hazy day in winter with a hint of snow in the air. The Rancocas was incased in ice and the bordering marshes gleamed white with frost.

Standing at the top of an em-

bankment, scanning the meadow below us through our glasses for signs of wild life, Pal and I discovered a tiny something that stood out from its surroundings with a pronounced silvery sheen.



NUMBER 2

Exposure 1/25 second, f.5.6

While we gazed it moved forward slightly with an odd jerky motion, both slow and clumsy. We were too far away to identify the object, but we knew it to be alive, and that fact, of course, aroused our curiosity to the point where a closer inspection became imperative.

Making a cautious approach, we were soon near enough to recognize our quarry as Mr. Dabchick, also known as the Pied-billed Grebe, and the Water Witch. This bird is the most common of the three grebes which visit the Rancocas, the

others being the Horned Grebe, of about the same size as our new-found friend, but with tufts of feathers projecting from each side of the head like a hood, and Holboell's Grebe, which is much larger, and very rare. The dabchick is about thirteen inches in length, and at a distance strongly resembles a duck with a chicken's bill. In fact, he is popularly known along many inland streams as the Hen-billed Duck.

He dresses immaculately, in a jacket of dusky grayish brown over a vest of silken white. His throat is adorned with a stylish black stock, worn hind side before, while a skull cap of the same sombre hue, pulled well down over the eyes, covers his shapely head.

This chance meeting was, for us, good luck, indeed.

Many times during the autumnal days, while drifting about the Rancocas in our canoe, we had endeavored to approach to within camera range of this feathered submarine, but without success. Every time before the canoe got close enough for a fair sized image to be visible in the Graflex mirror, the champion diver of all birdland disappeared only to bob up again serenely a hundred yards downstream.

As an example of the grebe's ability to sink from sight with great dispatch, let me say that it is next

to impossible to bag him with a gun if he happens to be looking your way when you shoot. He can actually "go under" between the explosion of the fire-arm and the arrival of the shot.

Get Mr. Dabchick away from his native environment, however, as in the present instance, and he is at the mercy of the camera man. He is not built for land travel, his feet being a pair of three-bladed paddles, shaped like the leaves of the horse-chestnut tree, attached at the extreme rear of the body. This makes walking, or even waddling, a very difficult matter. While he can fly, after a fashion, when once in the air, he is only able to "take off" successfully when rising out of the water after gaining momentum from fast swimming and wing beating. Some ornithologists claim that the grebe migrates in a "blow," taking advantage of the high winds to aid his flight. His land gait is a lurching ahead with breast to the earth, propelled by the paddles from behind.

Frozen out of the Rancocas, the bird was en route to a nearby marshy pool which a bubbling spring kept open even in the coldest weather. Here he could remain in cozy comfort until warmer days should come. Although his favorite food of frogs and lizards was not available at this season, seeds of grasses would furnish him with sustenance.



NUMBER 3

Exposure $\frac{1}{40}$ second, $f.5.6$

On arriving within easy camera range I prepared for the first picture. As the sky was overcast, and, realizing that our subject would, in all probability remain passive for portraiture, I set the big $f.4.5$ lens in our 4 x 5 R. B. Graflex at $f.5.6$, and the shutter at $\frac{1}{25}$ second, thus being assured of ample exposure even under adverse light conditions.

At my word of "Ready!" Pal moved forward, and, kneeling in front of Mr. Dabchick, stretched out a gloved finger. The bird held his ground valiantly, but showed his displeasure at our presence by angry lunges with a stubby beak.



NUMBER 4

Exposure
 $\frac{1}{40}$ second, *f.5.6*

Then Pal moved away just far enough to allay the anger, but not the curiosity of our subject, and it was under these interesting circumstances that portrait No. 1 was procured. The pose depicts Mr. Dabchick exactly as we found him on our first approach. He is in a characteristic resting position with head up and inquisitive eyes full upon the photographers.

"I wish he would show us his paddles," yearned Pal. "Do you think he will sit erect with a little urging?"

"Try him and see," I suggested, preparing the while for another picture.

With her little hand beneath his silvery breast, Pal very slowly and gently pushed him backward until he seemed in imminent danger of turning a somersault, but at the last instant he recovered his equi-

librium by sturdy wing flapping and spreading of feet. In this ludicrous position, he was literally sitting on his tail, or on the very few curly feathers which do service in that capacity, with webbed feet stretched out in front. It was thus that picture No. 2 was recorded.

While we were debating as to what sort of portrait to try for next, Mr. Dabchick solved the problem for us by lumbering ahead the few intervening feet to the brink of the pool, and gliding happily in—back in his element once again. No small boy at the spring re-opening of the old swimming hole was ever more wildly elated than was Dabchick now. He proved his ecstasy by innumerable swift and graceful evolutions, sending the spray a-flying merrily in dives and rushes—now, submerging—now, rising high upon the

NUMBER 5

Exposure
 $\frac{1}{10}$ second, *f.5.6*



NUMBER 6

Exposure
 $\frac{1}{110}$ second, *f.4.5*



surface, and, finally, with the combined aid of feet and wings, running on the water.

As the pool was shaded by bordering willows, it was not practicable, under the prevailing light conditions, to try for action pictures. That being the case, we were forced to wait until, his enthusiasm abated, Mr. Dabchick floated tranquilly about in his miniature lake.

By this time the haze had lifted somewhat, and while the sun was not bright by any means, we felt justified in increasing the shutter speed to $\frac{1}{40}$ second. When our subject struck a pose that pleased us, and his reflected image ap-

peared in the dark root-stained water, we made our third exposure, picture No. 3.

To get variety in our series of portraits we determined to include in at least one record, the ripples, which always lend enchantment to any aquatic wild life portrait. Patience brought us eventually the effect we wished, which is shown in No. 4.

The light was gradually growing better, and as we were preparing to take No. 5, a shaft of subdued sunlight fell directly upon the floating image of Mr. Dabchick, bathing him in mellow light. Taking advantage of this smile from the skies, I tripped the Graflex shutter.

A rigid test of the ability of the Graflex to produce worth-while action pictures in the shade came when Mr. Dabchick, apparently tired of swimming, pushed an awkward way up the bank of the pool, and, resting in the shadow of a willow, began preening his feathers with his beak. As he did this with quick movements of his head and neck, it was folly to expect to portray the scene without getting a blurred image, at a slower shutter speed than $\frac{1}{110}$ second. Therefore, the lens was opened wide (*f.4.5*), and the final exposure made. It was with grave doubt as to the outcome that No. 6 was taken, but the negative, made on *Super Speed* Kodak Cut Film, proved that doubt unwarranted.



WHEN THE SHUTTER CLICKED

Made with a No. 2 Brownie, by Otto Hirschberg

VIGNETTING ENLARGEMENTS

To have some one object, or an inseparable group of objects in a picture, command more attention than any other is a fundamental rule in all picture making that is not intended for purely record purposes.

A method that is often employed for compelling the attention of the observer to remain concentrated on the chief point of interest is to eliminate everything else from the picture. This is done by applying an opaque water color paint to the back of the negative.

This method is extremely efficient but, whenever the point of interest centres in a single object the result, when judged from a pictorial standpoint, is not pleasing. The blocked out image looks as though it had been cut out of a print and pasted on a sheet of paper. The subject lacks a "setting." It has neither foreground nor background. It rests on nothing, is suspended from nothing, and its appearance suggests that it has been kidnapped and is being imprisoned in the middle of nowhere.

The problem of eliminating the superfluous from the surroundings of the object of interest without injuring instead of improving the picture, cannot always be solved by trimming the print but it can, very often, be solved by vignetting. This method permits us to leave as much or as little of

the surroundings as we desire, as a "setting" for the subject. It also has the advantage of allowing us to discard the conventional, sharply defined, straight or curved marginal lines and use instead, faintly defined lines of any shape or combination of shapes, for the margins of the picture area.

The easiest way to make a vignetted picture—the way that even a beginner in photography can successfully employ—is to make it with the Kodak Auto-Focus Enlarger.

What makes the process so simple with this enlarger, and what gives this equipment an advantage over all other types of enlarging cameras, is the fact that it projects



As the amateur moves the card up and down the outlines of the picture expand and contract



A comparison of this picture with the one below shows how vignetting accentuates the object of interest



From a $3\frac{1}{4} \times 4\frac{1}{4}$ negative made by Wm. Stone



Effect obtained by eliminating the unnecessary from the picture shown below



From a 3A negative made by Julius F. Graether

the negative image downwards, to a shelf or table top, where the enlarged image is plainly visible, directly in front of us. This makes it very easy to move the vignetter (which is nothing more than a piece of ordinary thin cardboard with a hole in it) up and down, toward and from the paper on which the picture is being printed, and to do this with the greatest accuracy. We can therefore see, while printing, exactly what will be included in the finished picture.

The illustration, on page 9, shows how the vignetting is done. The piece of cardboard which the amateur is holding, prevents all the light that is projected by the lens of the enlarger, except that which passes through the hole in

the vignetting card, from reaching the bromide paper on which the enlargement is being printed.

In order to determine what size and shape of hole to cut in the card the negative image should first be projected to a sheet of white paper and the camera body moved up or down on the standard for securing the size of enlargement that is wanted; then a piece of thin cardboard should be laid on top of the white paper, so that the area that is to be included in the vignettted picture can be outlined with a lead pencil.

As the vignetting card should never be held closer to the bromide paper (during the printing) than, say, 3 inches, the hole in the card must be smaller than the area that



From a $3\frac{1}{4} \times 4\frac{1}{4}$ negative made by C. E. Johnson

is to be included in the enlargement.

After the hole has been cut in the card the photographer should observe how much of the area that surrounds the object of interest is visible on the white paper when the card is moved as far from the paper as it will be during the printing of the enlargement.

One of the objects of vignetting is to secure faintly defined lines for the margins of the picture area. These faintly defined lines are obtained by blending, that is, making a dark area gradually fade into a lighter one. The farther the vignetting card is held from the bromide paper (and the closer it is held to the lens) the more gradual will be the blending, and, the farther the vignetting card is moved toward and from the bromide paper, during the entire time that the picture is being printed,

the wider and more gradual will be the blending.

Our vignetted illustrations are half tone reproductions of enlargements that were made by the method we have explained. This process is so much simpler to work than to describe that anyone who knows how to make prints can successfully use it for making pictures that cannot be produced in any other way.

The most pleasing portrait vignettes are usually those that have light instead of dark toned backgrounds; but in landscape, and other kinds of outdoor pictures, good vignettes can be made from almost any negative that will make a good contact print, regardless of whether the background is light or dark. The picture below shows the result of vignetting a black background.



Typical of the vignettes that were made in the days of wood cut illustrations



ROUMANIAN PEASANT'S HUT

Made with a 3A Kodak, by Merle LaVoy

THEORY AND PRACTICE

DURING the years 1918-19, while a series of articles entitled the Fundamentals of Photography appeared in KODAKERY, we received letters from all parts of the country asking if these articles would be published in book form.

The first edition was printed in 1920. The following year another and larger edition was needed. The book has recently been printed in foreign languages.

While it was written primarily for giving an account of the theoretical foundations of photography, it also discusses the practical results that have followed the application of those theories. It is profusely illustrated with diagrams and photographs.

Of the 120 pages that the book contains only 7 are devoted to sketching the historical background that is needed for a comprehensive presentation of the subject. Though it is a scientific work it is written in simple language that anyone can understand. It deals almost solely with modern processes—obsolete methods being referred to only when necessary for explaining underlying principles.

The chapter on light and vision offers an explanation of the nature of light, and it discusses aerial waves—those impulses that, when projected into the ether, produce the sensations of light.

The chapter on lenses tells, among other things, how a lens

forms an image, the methods adopted for making light rays of different wave lengths come to a focus at the same point and it explains the differences between non-achromatic, achromatic, rectilinear and anastigmat lenses.

The book makes clear why some thin negatives have considerable contrast and some dense ones have very little, and vice versa.

Reduction and Intensification are discussed under the title *Finishing the Negative*. In this chapter every statement regarding the action of intensifiers and reducers is illustrated with diagrams and photographs.

The cause of Halation is explained in a more comprehensive and more accurate way than was possible before scientific research had disclosed what happened when light passed through an emulsion and was reflected back into it. The cause or irradiation, which is often mistaken for halation, is also explained.

In this brief review we have directed attention only to the unusual features. The book discusses every step of the photographic process, in a way that will enable all, even those who know little or nothing about photography, to understand on what theories the foundations of photography rest.

Another book, one that is complementary to "Fundamentals," because it deals with practice instead of with theory is, *How to Make Good Pictures*. This book explains all the details of picture making by photography. Many editions of this have been issued, but now much of the book has been entirely rewritten and such new matter has been added as was necessary to make it a complete text book of present day amateur photography.

Both of these books are sold at a nominal price by Kodak dealers.



IN THE GASTERNTAL, SWITZERLAND

Made with a 2A Brownie

LOOKING FOR
WINTER STORIES FROM



WARD
NEAR AND FAR





A TRAVEL RECORD

Made with a 3A Kodak, by Ernest R. Behrend

ENLARGING FROM PART OF A NEGATIVE

IN many a photograph that was made for recording an outdoor scene, a smaller picture, which was not recognized as a pictorial composition at the time the subject was photographed, has been found included within the area of the larger one.

As this small picture is usually more attractive than the scene of which it forms a part, it should be separated from its surroundings, so that it may command the recognition it merits.

The best way to accomplish this is by placing a mask over the negative, in such a position that nothing but the small picture can be seen through the opening in the mask.

The mask may be made of a piece of black paper, but, if the

picture is to have white margins, the opening must be cut very accurately, as the lines must be straight and the corners must form exact right angles. The most convenient way of making accurately cut masks is by using Eastman Mask Charts, which are closely ruled with cross lines. These cross lines solve the problem of securing exact right angle corners.

The picture that is obtained by making a contact print will, of course, be no larger than the opening in the mask, but an enlargement of any size, from $1\frac{1}{2}$ to $3\frac{1}{2}$ diameters, that is, from $2\frac{1}{4}$ to $12\frac{1}{4}$ times the size of the contact print, can easily and quickly be made by placing the masked negative in a Kodak Auto-Focus Enlarger, and



*An Enlargement made from the Pictorial Part of the Record
shown on opposite page*

printing the picture on bromide paper.

The result of making an enlargement from the pictorial portion of the record of a scene will be appreciated by comparing the picture on page 19 with the one on page 18.

A good way to determine what composition is best adapted for the small picture is by laying four cards, or strips of paper, on the negative, or on a contact print

that was made from the entire negative, and then moving them about until the most pleasing pictorial effect has been found. This will show the size and shape of the opening that should be cut in the mask.

By placing a mask chart on a sheet of glass and cutting the opening with the sharp point of a penknife, as it is drawn along the side of a straight edge, clean cut masks can easily be made.



THE BRIGHTEST LIGHT THAT IS SAFE FOR BROMIDE PAPER

THE light by which bromide paper is developed should not only be safe for the paper, but it should also furnish enough illumination that the photographer can readily see both the detail in the various tones of the picture and the contrast between the tones, while the print is in the developer.

The only way that the detail and the contrast can be seen during development, without straining the eyes, is by using a bright light, of a color to which the eyes are much more sensitive than the paper is. It has been found that an orange colored light fulfills these conditions more satisfactorily than any other.

Specially made orange fabric, and the orange colored paper known as Post Office paper, are often used in darkroom lamps when bromide paper is being developed. These are serviceable

but, unless they are placed between sheets of glass they are apt to become punctured.

Other objections to fabric and paper are, that when the light that passes through them is bright enough that the photographer can comfortably see all that is necessary during development they are apt to fog the paper, and, when the lamp with which either is used is placed far enough from the developing tray to be perfectly safe for the paper it does not transmit as bright a light as is needed for seeing all that is necessary.

The safest really bright light that we know of for bromide paper is that which is obtained by using a Series 0 Wratten Safelight in either a Kodak or a Brownie Safelight Lamp. This safelight consists of a bright orange colored filter, fastened between two pieces of glass.



ANCIENT ROMAN RUINS IN NORTHERN AFRICA

Made with a 3A Kodak, by Merle LaVoy

SEPARATE FIXING BATHS FOR NEGATIVES AND PRINTS

AMATEUR photographers sometimes ask us if prints can be fixed in the same bath that is used for fixing negatives. They can be, but this is not advisable, unless the bath is freshly prepared.

The reason for this is that a fixing bath that is used for prints should always remain clear and colorless, while a bath that is used for fixing negatives will usually become discolored before it is exhausted.

This is due to the fact that the developer is seldom completely washed out of the negatives before they are placed in the fixing bath, and is also due to the difference in the emulsions used for making negatives and prints. The unaltered silver that the fixing process removes from a print does not show as a visible precipitate, while

the silver that the fixing process removes from a negative forms a black precipitate in the bath.

A slightly discolored bath will not effect the quality of negatives, but it will often stain prints.

The fixing bath costs very little and can be used until exhausted. A 1-lb. package of Kodak Acid Fixing Powder, or a 1-lb. package of hypo acidified with Velox Liquid Hardener, will make 64 ounces of solution, in which two gross of $3\frac{1}{4} \times 5\frac{1}{2}$ or 4×5 prints can be fixed. Either of these baths may also be used for fixing negatives as long as it will clear the negatives inside of fifteen minutes.

It is economy to use separate baths for negatives and prints. Fixing prints in a bath that may stain them is not economy—it is extravagance.



Made from a negative that was exposed 40 seconds

JOE AND JERRY TRY A TIME EXPOSURE

FROM the very day that the senior partner's Uncle Ed added a Brownie camera to the assets of the firm of Joe and Jerry things quieted down in the neighborhood. Not that this particular pair of boys had been much noisier than most, but, before the Brownie arrived Joe and Jerry had followed certain pursuits, of which hoots, huzzas and hilarity seemed part and parcel. Picture making, however, was swiftly teaching them that some things are best done with "dignity and decorum"—a phrase so often used by the principal of their school.

Toward school, Joe and Jerry held the orthodox attitude. They wondered why someone couldn't invent a gymnasium that didn't have a school house built over it. The only feature of education that appealed to them was gymnastics.

Naturally enough they selected the gymnasium as a subject for a picture.

"It's got to be a time exposure," said Joe, "and we've never made one before. Guess we'd better have a look at the manual."

The manual was by that time well-worn from constant consultation, for Uncle Ed had specifically said, "the way to get good pictures is by following the instructions in the manual."

After they had read what it said about making time exposures Joe began the proceedings. He moved from place to place with the Brownie until the image in the finder showed just what he wanted, that is, he located the viewpoint. Then Jerry pushed a table across the floor to that spot and the camera was placed in position on it, a couple of inches from the front



Made from a negative that was exposed 150 seconds

edge, so that none of the table top would show in the picture. Joe took another look in the finder to make sure that the view was right, then drew out the slide that sets the shutter on "time," and moved the stop slide for placing the middle stop in front of the lens.

Everything was in readiness to record forever the scene of so many exhibitions of skinning-the-cat, hanging-by-the-heels and similar accomplishments. But Joe and Jerry found themselves confronted with the question of exposure.

The manual tells what exposure to give for interiors that have either white or colored walls, when the outdoor light ranges all the way from very bright to dull. The boys decided that the gymnasium had medium colored walls and more than one window. The outdoor light was cloudy-bright, so they gave a 40-second exposure.

"Let's make another, to see

what a longer exposure will look like," suggested Jerry.

"The first was forty seconds," declared Joe, who really owned the camera, "and the next will be 50."

"Oh, make it 150," pleaded Jerry. "Forty and 50 are too close together. Let's try the second one at 150, so we can see a big difference in the negatives."

Right there Jerry landed on a truth. When test exposures are to be made the difference between them should be as 3 or 4 to 1. For example, there would be very little difference in three negatives that were exposed, for 40, 50 and 60 seconds, but there would be a very marked difference if the first was exposed for 40, the second for 120 and the third for 360 seconds.

When the prints from the gymnasium negatives were ready Joe and Jerry found that while one negative was denser than the other there was very little difference in

the pictures, as the latitude of the film had taken care of the over-exposure. They had learned that Kodak film may be given considerably more exposure than is needed, and still produce good printing negatives.

"We ought to remember everything we learned from making these pictures because they are our first time exposures," Joe said. "I pulled out the time slide, set the stop, then pressed the lever to begin the exposure, and pressed it back to end it. That's all there was to it."

"Why you've forgotten the most

important thing of all," grinned Jerry, who recalled that his principal part in making the picture was moving the table. "You have to set the camera on something solid when you make a time picture. If you tried a time exposure by holding the Brownie in the hands the picture would be blurred so badly it wouldn't make any difference how many of the other points you remembered."

"Well, we remembered all the points and got a good picture, didn't we?" retorted Joe.

And Jerry agreed that they were gym dandies.



MAKING UNEVENLY DRIED FILMS LIE FLAT

WHEN films are dried by artificial heat they sometimes dry very rapidly, but when they dry very rapidly they do not dry evenly. Frequently both edges of the films and sections across their entire width will be "bone dry" while other parts of the films are still moist. This will make the films buckle in drying. This difficulty can be avoided by drying the films ten feet or farther from the source of heat, and it can also be corrected after it has occurred by placing the *dry* films, say, half an inch apart, face down, on a sheet of clean paper, a few feet long, which is then rolled around an ordinary cardboard mailing tube, 1½ inches or more in diameter, so the films will be given a backward curve, that is, a curve like the letter U, with the

emulsion side of the film on the outside of the U.

If removed from the roll at the right time (usually at the end of two or three hours) they will lie as smooth and flat as a sheet of paper. If left on the roll for several hours they will retain the backward curve, but this curve can be readily removed and the films made perfectly flat by again placing them on the roll—other side up this time—and leaving them there about half an hour.

The writer has experimented extensively with the flattening of films that were dried under extremely unfavorable conditions, and has found that the roll will always perfectly flatten both roll films and film pack films when pressure alone would not accomplish this result.



ON THE COAST OF BRITTANY

Made with a Premo

SAME STOP VALUE CALLS FOR SAME EXPOSURE WITH ALL TYPES OF LENSES

WHEN we speak of the so-called "speed" of a lens we refer to the *f.* value of its largest stop. The *f.* value is the relation that exists between the diameter of its effective aperture and its focal length. If, for instance, this diameter is 1 inch and the focal length is 8 inches the *f.* value is $1 \div 8$. This is called *f.8*.

The "speed" at which a lens works is determined by the amount of light that it transmits to the film, and while this depends on several factors, some of the light being absorbed and some reflected by the lens, yet for all practical purposes we may regard it as being determined by the *f.* value of the stop used. The larger the stop the more light the lens will pass and the shorter the exposure that needs to be given.

The largest stop on a meniscus, which is a single lens, is smaller

than the largest stop on a rectilinear, which is a double lens. The largest stop on a rectilinear is *f.8* (U. S. 4.).

An *f.7.7* anastigmat is nearly 8% faster than a rectilinear, an *f.6.3* anastigmat is about 62% faster and an *f.4.5* anastigmat is about three times as fast as a rectilinear, but, it must be remembered that when any anastigmat is stopped down to say, *f.8*, it works at *f.8* speed and it is then necessary to give the same exposure with the anastigmat as is needed with any other kind of lens that is used with stop *f.8*.

The rule is to give the same exposure with all kinds of lenses when the stop used on each has the same *f.* value. When it is desired to give a shorter exposure with an anastigmat than with other lenses, the anastigmat must be used with a larger stop than the other lenses.

PLEASING PRINTS FROM UNDER-EXPOSED
NEGATIVES

It has often been said that the best use to make of an under-exposed negative is to throw it away. It may be all right to do this after a better one has been obtained of the same subject, but it is a very unwise thing to do if a better one is not to be had.

An under-exposed negative always lacks detail in the shadows. The impossibility of making a print show detail which the negative does not contain is obvious, but it is often possible to make a print in sepia, from such a negative, which will be more pleasing than any print that can be made from it in black and white.

If the under-exposed negative has very thin highlights it will be flat, that is, lacking in contrast. If the best print that the negative can make in black and white, on Contrast Velox, is not satisfactory, the negative should be intensified with the Eastman Intensifier, so that its contrast will be increased, after which a print should be made from it in sepia.

If the under-exposed negative has dense highlights and clear shadows it will be hard, that is, contrasty. A hard negative should not be intensified because it has all the contrast that is needed for making a rich sepia print.

It must not be supposed that intensification will add detail to a negative, nor that printing in sepia will add detail to the picture. Intensification merely increases the contrast between the tones of a negative, and, by so doing, it often

makes it possible to print long enough for getting a deep sepia tone in the shadows and a light sepia tone in the highlights. When this happens the intermediate tones will be rendered in different shades of sepia, and as we can see more distinct tones of sepia than of black, a sepia image will usually show more tones than a black one.

There are two kinds of under-exposed negatives that can not be made suitable for printing in sepia—those that are so hopelessly under-exposed that no images can be seen by looking through them, though ghostly images may be faintly visible by the light that is reflected from them, and those utterly discouraging ones that are fogged. It does no good to intensify a photographic ghost, for it always remains a ghost, and by intensifying a fogged negative we increase the density of the fog as well as the density of the image and, consequently, gain nothing.

The method we have recommended will not produce the kind of pictures that can be made from correctly exposed negatives, but it will produce pictures from negatives that have masses of dark tones in contrast with light ones, that are often very pleasing.

While sepia prints can be made on all the various Velox papers, excepting glossy, yet for under-exposed negatives we especially recommend Royal Velox, which makes sepia pictures on a cream-tinted ground.



GOING SHOPPING

Made with a 3A Kodak, by Frank D. O'Brien

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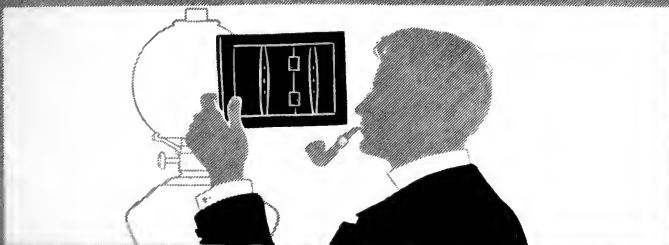
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MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



JUNE 1923



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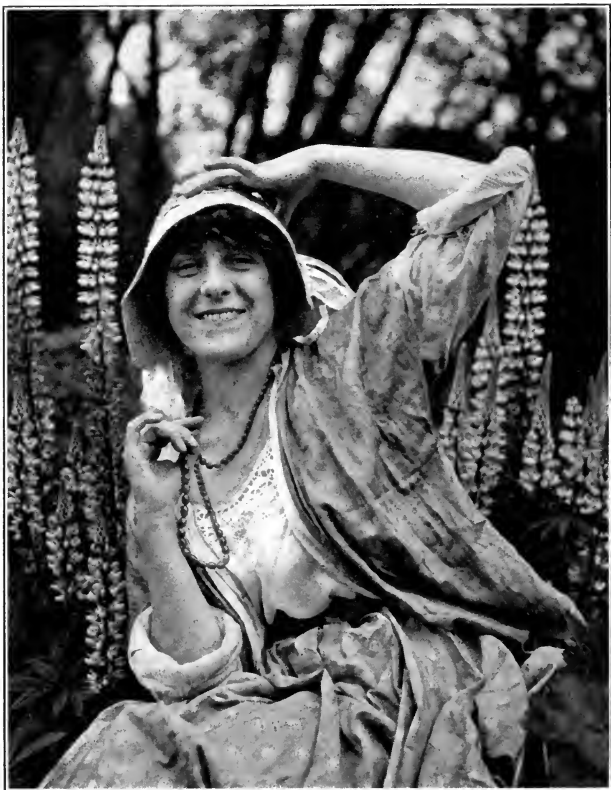
The Enlarger accommodates film or plate negatives up to 4 x 6 inches and is furnished complete with six metal masks, negative and paper holders and electric cord and plug. The 60-watt Mazda lamp for illumination is not furnished.

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VOL. X

JUNE, 1923

No. 8



AN ENGLISH RIVER
Made with a 1A Kodak Junior

“STEP-IN” PICTURES

BY C. HAZEN TRAYVOR

WHETHER we realize it or not, our thought is always likely to follow our eyes. If we see a thing we go towards it in imagination. We may, if it is ugly, go shrinkingly and come away quickly. If it is lovely we feel like staying, and our imagination *can*

stay as long as our glance has the privilege of staying.

Where I write there are a number of framed pictures of romantic-looking places, scenes in soft climates, with tropical trees, terraces, stretches of sea, lazy boats at anchor. No figures are in sight,



LAKE LUCERNE
Made with a 1A Kodak

and I can step into these pictures and make the scenes mine if I want to.

Yes, there are some small figures in one or two of the scenes, but they do not seem to forbid my coming in. I can walk quite freely on these terraces, in the paths of these gardens, along the edge of these seas. I can even slip into one of these quiet boats, lift anchor and make sail without seeming to be interfered with.

It is a great comfort to be able to do this, to be able to let the eyes take the mind by the hand and lead it into far away and perhaps fantastic places, or into places as quiet as a parlor, and for the time to be lifted out of the actual present circumstances of our lives.

I think of such pictures as "step-in" pictures, pictures that seem to need me to complete them.

When I stand on the dock at Lucerne a meaning is given to the scene. When I stride into the garden of the castle the pomp of the place takes on a different look. Before the thatched cottage I wonder if they would take a boarder for that snug room under the eaves. And in front of the quaint Twickenham fireplace I hardly get my chair pulled up before the fire begins to blaze.

Best of all "step-in" pictures are those we inhabited when we made them, and which hold ready ever after to let us step in again. Such pictures always remain ready for our imaginary re-visit, quite like a carefully dusted room that is ever prepared for our coming. We don't want them changed. We want them to keep on looking as they looked when we first visited them. We know just where to



IN THE ENTRANCE HALL, CAMBRIDGE HOUSE, TWICKENHAM
Made with a 3A Kodak

walk, just where to sit, just what will be visible from any given point, just what their temperature was, how beautiful the colors. The odors come back—and other people we met; and we may have the luck to be able to recall each time a chosen and charming companion who went with us—say on a wedding journey! *Did* you ever happen to think how often a Kodak goes on a wedding trip—as the third one who *doesn't* make a crowd? Well, it happens every day. And it happens every day, somewhere, that the Kodak pictures are brought forth (where they are not framed forth) to open again the vistas of happy peace.

This is my plea, then: While making pictures, or while preserving them, to yield rights to the “step-in” kind. The charm of action, of foreground interest, of accent in composition—all these considerations are important. But sometimes we will take only the scene—sometimes simply the stage setting, as you might say, will be a thing we want to keep and carry away with us for a later inhabiting when we happen to feel like going back, alone or in company.

Thus the Kodak is a partner of Memory—a silent partner, yet able to be very eloquent, full of interesting suggestions without saying a



THE MOSQUE OF OMAR
Made with a 1A Kodak Junior

word! Memory must have its backgrounds, and when the Kodak sets these up, giving all the detail truthfully, Memory is free

to enjoy the riches of experience.

There is no pleasanter journey than to "step-on" the imagination and "step-in" the picture.



THE VILLAGE ROAD
Made with a 3A Kodak



GOING ALOFT
Made with a 3A Kodak Jr.



THE HOUSE WREN

JENNY OF BUNGALOW AND GRASS TEEPEE

BY HOWARD TAYLOR MIDDLETON

Illustrated by the Author

WE were photographing fussy little Jenny, the house wren, as she perched, for just an instant, upon her front porch before carrying sundry grubs and moths to her hungry children within the bungalow nursery. To do this successfully, the camera was fastened with a Kodapod to the top of a stout 10 ft. pole, bringing the lens to the proper level, and a strong thread was run, first from the shutter lever through a serew-eye that was attached to pole and then to a couch hammock in the shade of an old tree. Wild life photography may sometimes be indulged in under very com-

fortable circumstances, you see.

Two satisfactory front porch pictures had been procured when suddenly the fluffy head of a youngster appeared at the doorway, during mother's absence; then a whir of tiny wings beat the air as the first baby adventurer started out to see the world. A chocolate cream and a smelly pipe raced each other to the ground as Pal and I went into action. It was the work of but a few moments to take the camera from its pole and start a search for the young birds, who had by this time left the nest. Soon we discovered one downy sprite amid the greenery of the



ON THE GRAPE VINE

grape arbor and photographed him there, but his five brothers and sisters we did not find, though we searched the neighboring shrubbery with great diligence.

"Do you know what would be

just fine?" asked Pal enthusiastically.

"No; what?"

"Paddle up the creek to the meadow by Genter's cabin, where Jenny's wilder cousins, the long-



A "FRONT PORCH" PORTRAIT

billed marsh wrens live, and get some more pictures."

I took a few moments to deliberate upon this question before rendering an opinion. The portraits in question were well worth trying for; there was no gainsaying that, but the difficulties that must be surmounted prior to victory were not to be ignored either. This nervous little elf of the swamp insists upon building its nest—or rather nests, for it usually builds several—among the weeds, where it is difficult to work with a camera. However, I decided to try for the pictures. A luncheon was soon packed, the canoe launched, and we started for the marshes.

Drifting quietly up the very ditch in which Snow Wing, the

egret, posed for me so magnificently once upon a time, we came to the village of grass tepees constructed by the long-bills. There were ten of those unique globular dwellings cleverly concealed in the marsh vegetation, and knowing the habits of the cunning and industrious architects, we realized it would take watchful waiting to find which homes were tenanted. Tepee Jenny and her lord are not content with one home, as are most birds, but needs must build four or five. This is done to protect the brooding female of the species, and invariably, when the village is raided by an enemy, the male wren will lead the way to an empty dwelling, thus often saving the life of his mate.

A thing to remember when



THE MARSH WREN



THE MARSH WREN AMONG THE WEEDS

visiting a marsh wren village is the importance of refraining from handling the nests. Jenny would immediately abandon her tepee were it defiled by the touch of human hands.

The canoe was nosed into the

reeds at the ditch edge, and we observed the village for signs of life. We were no more than comfortably established in our camouflaged retreat when the stillness of the marsh was broken by a sudden, frequently repeated, and abruptly



BRINGING FOOD FOR THE BABIES

ending roulade greatly resembling the song of the house wren except for a wiry and harsher note which is absent when Jenny of the bungalow sings. Hanging head downward upon a cat-tail stalk, its throat swelling with throbbing melody, a marsh wren swayed in the gentle breeze. Nearby in the shelter of the reeds was a splendid nest, and from a tiny hole in the side protruded a curved beak. We had found our quarry.

Working from the canoe, we drove our 10 ft. pole into the mud before the nest, finding solid bottom at a depth of 7 ft., which served our purpose very nicely. The camera having been clamped with the Kodapod to the pole top, and focused upon the nest, a thread was attached to shutter trip and run to our hiding place.

To our intense delight the birds did not fear the camera, but started almost at once to carry food to their young inside the grassy ball. When we discovered the landing stage to be unsatisfactory, we improved conditions in this particular by placing a reed stalk in horizontal position just in front of the nest to serve as a runway upon which the birds might land and "take off." Two of the pictures show very clearly how much this favor was appreciated.

Although the long-billed marsh wren is somewhat plentiful, the inaccessibility of its retreats, and its timidity, cause it to be little known and very rarely photographed. Therefore, our journey homeward through the sunset-bathed waters of the Rancocas was fraught with joy that comes only after a meritorious achievement.



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FISHING FAITH
Made with a No. 3 Kodak

THE MALGRATH MYSTERY

WHENEVER I try to select the exploit of my friend Holmes in which his powers of deduction were most impressive, I am invariably persuaded to the Malgrath Mystery, although I feel convinced that this choice over the Purple Pearl Puzzle or the Moist Murder will hardly find approval with the public at large. It is the spectacular against the subtle and the recent death of J. P. Malgrath, together with the suicide of Oscar W. Osgood, makes a true recital of the facts in connection with this mystery possible for the first time.

It was hot, summer, and half past two when Mr. Osgood stumbled into our rooms at Baker Street.

"What's that in your hand?" said Holmes quick as a flash, as his eyes pierced those of our visitor. "Yesterday morning," began Mr. Osgood in a choked voice, "I persuaded my employer, Mr. Malgrath, to pose for a picture for my Kodak. It was my intention to give him a print but look—look!"

He extended the picture. Holmes and I studied it in silence. It was the most peculiar thing I ever saw. It gave the effect of a miniature fountain playing from the top of Mr. Malgrath's head. I have tried to reproduce it here in a drawing but the effect in the photographic print was even more startling.

"You have no explanation?" I ventured. "Your employer does not wear a toy fountain on his head perhaps?"

"He does not, sir—I can't explain it."

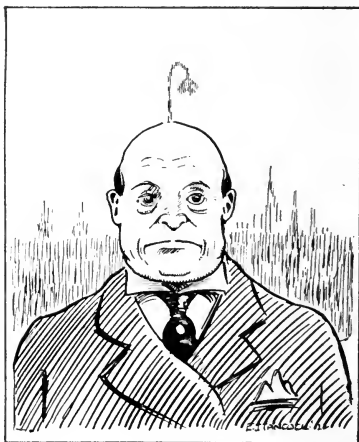
Holmes stared at the picture fixedly.

"Watson," he said, "call a cab."

The few minutes elapsing before the arrival of the conveyance were more than enough for Holmes to disguise himself in clerical attire. "Drive us to the spot where you made the picture," directed Holmes to Osgood. "Or better still, have the man on the box do it."

Fifteen minutes found us at the Reffington Estate. "He sat just here," said Mr. Osgood, indicating a bench. "Sit down, Watson," commanded Holmes. "He's about Malgrath's build isn't he?" Osgood nodded.

Osgood then pointed out where he stood when he made the picture, how high the camera was



Not a Toy Fountain—Merely a Sunflower in the Distance

from the ground, etc. Holmes squinted his eye toward my head "Look," he said. "Here's your mystery."

Osgood gazed as directed and broke into a smile.

"Of course," he said. "It's in the background. Why that's a withered sunflower plant. And it seems to be growing right out of the doctor's head, doesn't it?"

"Wonderful!" I gasped, and running to my friend's side tried the experiment myself, but of course I wasn't sitting on the bench any more and the illusion was not so complete.

"Elementary, my dear Watson," returned Holmes with a smile. "But if I were making pictures I'd see what my background was doing before I pressed the button."



WHEN THE BUILDING FACES NORTH

THE most attractive side of many a building faces north, and in the northern hemisphere, during the winter months, this side receives no sunshine, while during the summertime it may be almost hidden from the best point of view by heavy foliage.

Such a subject can best be photographed in springtime, just before the leaves come. From about April to September the sun rises north of east and sets north of west, and in the early morning or late afternoon it shines on the north side of buildings. Throughout the greater part of Canada the leaves on most deciduous trees do not fully unfold until sometime in June.

When photographing buildings be sure the camera is level. If it is pointed upward the building will be represented as tapering upward and leaning backward. When the vertical lines of the building are parallel with the right and left sides of the finder or ground glass the camera will

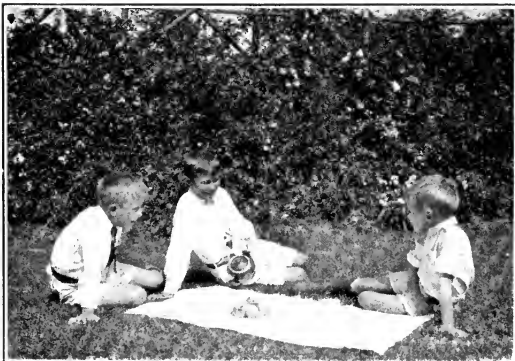
be level and all the lines of the building will look right in the picture.

For a light-colored building, when the sun is shining brightly, between 6 and 8 in the morning and 5 and 6 in the afternoon during May and June, give an exposure of $\frac{1}{25}$ of a second, using stop 8 on rectilinear lenses or stop *f.11* on anastigmats. For a dark-colored building try $\frac{1}{25}$ of a second with the next larger (lower number) stop.

With the box type of camera, like those models of Brownies and Premos that have no bellows and do not need to be focused, and with focusing cameras that have stops marked 1, 2, 3, etc., make the pictures not earlier than 7 in the morning or later than 6 in the afternoon by giving a snapshot exposure, using the largest stop for light-colored buildings, and for dark-colored buildings place the camera on a tripod or some other rigid support and make an exposure of 1 second, using the smallest stop.

LITTLE TRUE STORIES

FAITHFULLY TOLD
BY VARIOUS KODAK



ES OF CHILDHOOD





Blurred images will be obtained when objects that are moving rapidly, at right angles across the field of view, are photographed at too short range

JOE AND JERRY GIVE THE BROWNIE A TEST

LIKE the Three Musketeers, Joe and Jerry had a gentleman's agreement whereby each shared the other's projects and property. Anything belonging to either belonged to both.

They had held in joint ownership a flock of pigeons, a tool chest, a turtle, a fish net, a scroll saw, a goat, an accordion and various other paraphernalia particularly useful to youth. So Jerry had some precedent for his claim to a half interest in the Brownie camera that Joe received from his Uncle Ed.

Even Jerry's bicycle, the boys' latest acquisition, became a by-

gone when the camera arrived, else the two might have been disturbed by the Beam kid's efforts to show off with their bike. They had spent half an hour riding around the corner of the park that Joe and Jerry considered their own domain.

"Bet your camera couldn't take a picture of us," taunted Dan Beam, perched precariously in front of his older brother, Ben.

"Bet it will," Jerry retorted promptly.

"Bet it can't," declared Ben.

Thus the challenge was issued and accepted, but it had yet to be settled.



A square front view seldom shows enough of the moving objects



A diagonal view of moving objects is always pleasing

Joe by virtue of an extra year or two, was more conservative than his partner. He explained that the Brownie is not supposed to be a speed camera, else it could not be so easy to use, but that he guessed he could figure out some way to photograph the Beam boys on their bicycle.

He made three exposures, thus finishing the roll. Then began a couple days of suspense. While the film kept the secret the youngsters kept a constant vigil at the finisher's.

Finally the prints were ready. Two of them showed that a Brownie can make sharp pictures of moving objects when conditions are right. Even the Beam boys conceded it.

The picture showing the bicycle moving diagonally across the field of view was much better than the other two.

"Say, get us a couple like this, will you?" asked Ben Beam. "It's pretty good. I don't like this front view though. Can't see my face at all and the bike doesn't seem natural. Just shows Danny and the front wheel."

"This fuzzy one is awful," Dan Beam commented.

"Pretty bad all right," admitted Joe. "Looks like you were going about a mile a minute. But now I know how to make a picture of a moving object with a Brownie.

"You have to stand partly in front and partly at the

side and take a diagonal view. If you stand directly in front you can't see the whole subject. And if you stand directly at the side you get just a blur."

"You sound like a professor," scoffed Dan Beam.

"Well I guess we know quite a bit about it," was Jerry's reply. "We got a book with the camera and we read it through from start to finish."

"It's a manual," explained Joe. "It tells everything."

"Just like Sadie Sharp," Ben muttered.

"How do you mean?" demanded Jerry.

"She tells everything, too."



CONFIDENCES

Made with a No. 1 Kodak Jr.



IN THE DAYS OF LONG AGO

STEREOS STILL IN STYLE

THE old fashioned clock, the framed motto above, the what-not, the wax flowers, etc. in the picture reproduced above, take one back to grandma's day when almost every "sitting room" table bore a basket of stereoscopic pictures.

How interesting those pictures were and how wonderfully realistic the scenes became when the pictures were viewed in the stereoscope!

The stereoscopic pictures of those days could be made only by experts and most of them repre-

sented scenes in foreign lands or subjects that were not of enduring interest to us, as we had never seen them.

Today, with the Stereo Kodak, every amateur photographer can make his own stereoscopic pictures of subjects that are of interest to him, as easily as he can make any other kind of pictures.

A camera with one lens makes a picture having two dimensions,—length and breadth, while the Stereo Kodak, with its twin lenses, makes two pictures side by side on the same negative, and these,

when viewed through the stereoscope, merge into one in such a way that the picture shows three dimensions,—length, breadth, and *depth*. This depth is what makes the picture so realistic that it looks like an actual miniature of the scene itself. The third dimension shows us the view just as we saw it in nature.



BROMIDE PAPERS

MANY photographers who make enlargements from small negatives, or from parts of negatives, have discovered that practically every negative that will make a good contact print will make an enlargement that is more attractive than the print.

The chief reason for this is that in pictures made from small negatives three or four tones may be recorded in so small an area that only one or two of them may be plainly visible in a contact print, but in an enlargement these tones occupy a greater area, with the result that all of them can usually be plainly seen.

Enlargements are made on bromide paper. This paper is as easy to manipulate as any other developing paper, but it prints much quicker and develops more slowly than any other paper. It takes not less than a minute and a half for a correctly printed bromide enlargement to develop to its full strength and brilliancy.

Eastman Bromide papers are

When we view a stereoscopic picture in the stereoscope we feel that we can walk all around the objects that are in it.

If you are a "stereo fan" it is certain that you are an enthusiastic one, but if you have never been initiated into this fascinating field of photography there is much pleasure in store for you.

made in various surface finishes. Those that have been used for many years by amateur photographers are listed under the names: Standard, Enameled, Velvet and Royal.

The surface finishes of these papers compare with the surface finishes of Velox, approximately, as follows:

Bromide Papers	Velox Papers
Standard B	Carbon
Enameled	Glossy
Velvet	Velvet
Royal	Royal

Prints on Standard paper appear darker in tone, and consequently less brilliant, when dry than when wet. For this reason they should be so printed that after they have been fully developed they will be a shade lighter than the dry print should be.

Prints on Enameled Bromide appear practically as brilliant when dry as when wet.

Velvet Bromide prints are but slightly less brilliant when dry than when wet.



BRITTANY PEASANT GIRLS

Made with a 3A Kodak; exposure $\frac{1}{2}$ second, stop 16

Standard, Enameled and Velvet Bromide are coated on white stock.

Royal Bromide is coated on a cream or buff colored stock. When a print on Royal Bromide is developed in the usual way the image will be black, but when this black image is re-developed with the Royal Re-developer a sepia picture will be obtained which, if made from a negative that has strong highlights and deep shadows, will be often more pleasing than a picture of the same subject in black and white. Prints on Royal Bromide are nearly as brilliant when dry as when wet.

Velvet and Royal are probably more used by amateur photographers than any of the other bromide papers.

To the pictorialist, who prefers a paper that will subdue detail, and thus produce pictures in which the emphasis is laid on composition and tone values, the new bromide paper, known as Old Master, will make a strong appeal. This has a surface which resembles canvas. It is made in both white and buff. Old Master enlargements are less brilliant when wet than when dry.

All the papers we have mentioned, with the exception of Velvet, are made in only one degree of contrast. They are adapted for negatives that have sufficient contrast for making brilliant prints on No. 2 Velox (formerly *Special*).

Brilliant Velvet Bromide, which has the same surface finish as Velvet Bromide, is intended for negatives that are too flat for No. 2 Velox, but have contrast enough for making brilliant prints on No. 3 Velox (formerly *Regular*).

No bromide paper is suitable for use with negatives that are so extremely flat and lacking in contrast that they will only make pleasing prints on extremely contrasty paper.

Owing to the speed with which prints can be made by placing a sheet of Velox in contact with a negative in a printing frame, and the fact that Velox paper can be manipulated in weak daylight as well as in a bright yellow light, while bromide paper must be manipulated in an orange colored light, all bromide papers are only recommended for making pictures that are larger or smaller than the negatives from which they are printed.



ON THE WAY TO MEMPHIS
Made with a No. 4 Panoram Kodak



A Black Background makes white objects most conspicuous

BACKGROUNDS FOR SMALL OBJECTS

IT'S easy to understand a single voice but who can tell what a mob says?

The case with pictures is much the same because the eye is as easily confused as the ear. The less that competes with the principal object, the more interesting its picture is. While appropriate surroundings often add atmosphere to story-telling pictures, an individual object is best photographed alone. Then it stands out prominently, announcing its importance at once.

Merely getting rid of everything that is unrelated isn't enough, however, to insure a pleasing picture. The proper background must be chosen. Figured wall paper or an uneven drapery is certain to detract. A plain surface, of a color that photographs considerably lighter or darker than the object, is correct. Then the principal element stands out dis-

tingently and attracts the eye at once.

Whatever its natural colors, any object is rendered in black, white or some tone of gray in the picture. If it will photograph white or light gray, a black or dark gray background should be chosen and vice versa.

A gray ground, considerably different in tone from the subject itself is usually the most suitable because it gives enough contrast to set off the thing of importance without going to a glaring extreme. When gray material is not available, light brown wrapping paper may be used. The tone it gives depends on the amount of light that reaches it.

Extreme contrast is sometimes advisable, however, when the subject contains delicate tracery such as the fluffiness of a milk weed pod or the spines of a cactus plant. Then black and white backgrounds are desirable.



THE LILIES

If only the upper part of the subject is wanted in the picture a vertical background suffices. It may be fastened on a wall or suspended by any means that will keep it free from wrinkles. When the whole subject is to be included it is preferable to use a sloping, or draped, ground extending underneath and in front, thus avoiding the line that would show where the table meets the background. The accompanying diagram shows an easy way to arrange such a setting. The background should be about two feet wider than the subject and ought to extend eighteen inches above it.

In making pictures of small objects it is desirable to get a large, distinguishable image—an obvious opportunity for the Kodak Portrait Attachment, which enables a Kodak or Brownie to do close range work.

The photography of small objects is easily carried on indoors near a window. A straight side lighting, obtained by setting the subject opposite the centre of a window, and pointing the camera

at right angles to the direction of the light, does nicely in many cases. But for roses, lilies and almost all flowers the light should shine downward at an angle of 45 degrees to illuminate the folds and hollows of the plant. This is easily arranged by covering the lower third of the window and placing the object opposite the edge that is farthest from the camera.

Obstructive shadows on the unlighted side of the subject may be avoided by using a white cloth or paper to reflect light toward the portion in which the shadows appear. By watching from directly in front of the lens the effects obtained with the reflector in different positions may be studied.

Strength of light determines the period of exposure, to be sure, but when the subject is three to five feet from a window through which the sun does not shine try $\frac{1}{2}$ second to 1 second between 9 and 4 o'clock on sunny days; 2 seconds to 4 seconds on cloudy days. Stop 16 with anastigmat and rectilinear lenses or the second stop with a single lens is recommended.

And keep the wrinkles out of the background.

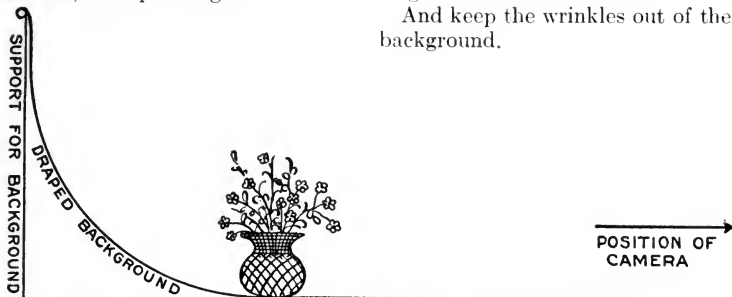


Diagram showing how background should be draped for securing the background effect shown on page 25

SERVICE DEPARTMENT TALKS

WITH the bright days approaching, when nature is at its best, your camera will soon be busier than ever.

Before beginning operations the camera should be looked over and thoroughly cleaned, especially if it has not been in recent use. The inside of the bellows should be dusted out with a camel's hair brush; the lens should be wiped off with a soft, clean linen handkerchief, that will not scratch the surface. Then try the shutter several times and see that everything else is in good order.

If, by any chance, your camera has been damaged, have your dealer send it to the makers for repairs, so that it will be ready when you need it.

One of the functions of the Service Department is to help users of our goods to get the best results. If you have any photographic problems, or wish any photographic information, we will gladly assist you and, as in the case of all Kodak Service, there will be no charge.



Address all communications,

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

*Announcing a new Kodak attachment
for a new kind of picture*



Kodak Diffusion Portrait Attachment

SLIPS over the camera lens and makes "close-ups" in *soft* focus. The focus is accurate but the effect is diffused, mellow — and pictorially interesting. In portraits, for example, character lines are rendered with a pleasing softness that is strikingly distinctive.

Kodak Diffusion Portrait Attachment

\$1.25 and \$1.50

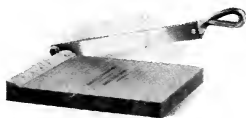
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CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

Kodak Trimming Boards



KODAK Trimming Boards are durably made of well-seasoned, hard wood; the knife is of good quality, tempered steel; the rule is marked plainly and permanently.

No. 1, capacity, 5 x 5 inches \$0.75

No. 2, capacity, 7 x 7 inches 1.00

Kodak Film Clip

WITH its ample width of two inches and its strong, toothed jaw, this clip is suited for any negative in the amateur sizes. Made of monel metal, the grip on the film is sure and will not weaken with usage.



Price each, 40c.

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

Kodak Cut Film

Super Speed

WHEN the day is dull, the shadows deep or the exposure fast and the light weak—the conditions point to failure, but Super Speed film spells success.

It has the same long scale of gradation, fineness of grain, wide latitude and non-halation value as regular Kodak Cut Film and extra speed to cope with difficult photographic conditions.

With the Kodak Cut Film Sheath, Kodak Cut Film both regular and Super Speed may be used in any plate holding camera, including, through the agency of the Combination Back, the Nos. 3 and 3A Kodaks, both regular and *Special* models.

PRICES

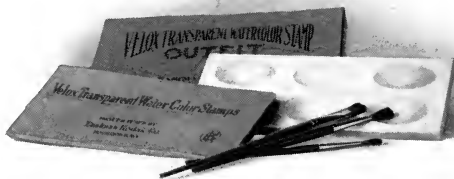
	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, doz.	\$0.45	\$0.65	\$0.90	\$0.90	\$1.45
Kodak Cut Film <i>Super Speed</i> , doz. . . . .	.50	.75	1.00	1.00	1.60
Kodak Cut Film Sheath, each . . . . .	.12	.12	.18	.18	
Eastman Film Sheath . . . . .					.30

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

Tint the print with a



Velox Transparent Water Color Stamp Outfit

WITH this outfit you'll find it easy to give your prints the colors nature gave the scene.

Velox Water Colors are permanently brilliant, correctly blending and transparent to a high degree. None of the photographic detail is lost in coloring —no especial skill is required for pleasing results.

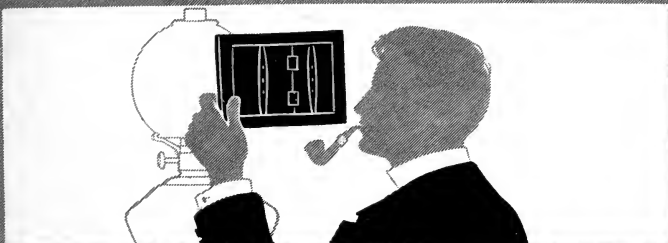
The outfit, neatly packed in a convenient cardboard case, includes mixing palette, three brushes and Velox Transparent Water Color Stamp book with twelve sheets of colors each scored into twenty-six stamps. Just add water to Velox Stamps and you are ready to tint.

Price, complete, \$1.20

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At Kodak dealers'



Prints by Gaslight

Now supplied in four degrees of contrast

VELOX

No. 1 for extremely contrasty negatives

(A new contrast)

No. 2 for average negatives

(Formerly "Special")

No. 3 for flat negatives

(Formerly "Regular")

No. 4 for extremely flat, weak negatives

(Formerly "Contrast")

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's



THERE'S pride in owning such a splendid instrument as this new Kodak, and the sharp, brilliant pictures it makes are a genuine joy.

Price, \$65
Picture 2 $\frac{3}{8}$ x 4 $\frac{3}{8}$ inches

No. 2C Autographic Kodak *Special*

So popular have the 2C proportions become that there has been a growing demand for a camera with superior equipment making pictures in this ideal size. That is the reason for this new model, the 2C Autographic Kodak *Special*.

Kodak Anastigmat lens $f.6.3$ cuts sharp, and takes full advantage of the seven snapshot speeds from $\frac{1}{2}$ to $\frac{1}{150}$ of a second accorded it by the Kodamatic shutter.

Equipment includes as well the Kodak Range Finder that finds the right focus, rising front, autographic feature, and an automatic exposure plate that gives at a glance the proper shutter speed under the light conditions that obtain and with the lens opening used. The camera is made of aluminum, for lightness, and covered with finest sealskin, for looks.

See this *Special* at your dealer's

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

KODAKERY

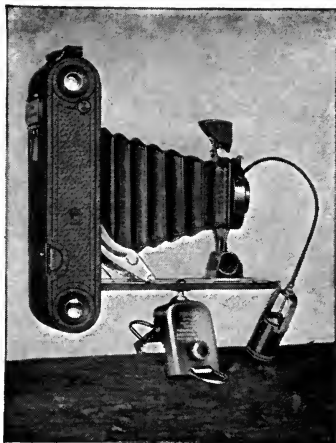
A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



JULY 1923



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



*For more fun
with your Kodak*

*The Kodapod
grips the wood—
the Timer trips
the shutter*

Kodapod—Out of your pocket and into position it does tripod duty. The toothed jaws are spring-controlled to hold firmly while the screw fits any standard size tripod socket.

Price, \$2.25

Kodak Self Timer—Attaches to any cable release and presses the button so you can be in the picture. You can set it to operate at any interval desired from $\frac{1}{2}$ second to 1 minute.

Price, \$1.50

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's



*A new attachment that
enables you to make soft
focus portraits with your
Kodak.*

Kodak Diffusion Portrait Attachment

WHILE the focus is accurate, "close-ups" with this attachment are pleasingly diffused and artistically appealing.

In portraits, for example, character lines are softened and brilliant highlights reduced.

Slip the attachment over your camera lens, place the subject close-up and expose as usual.

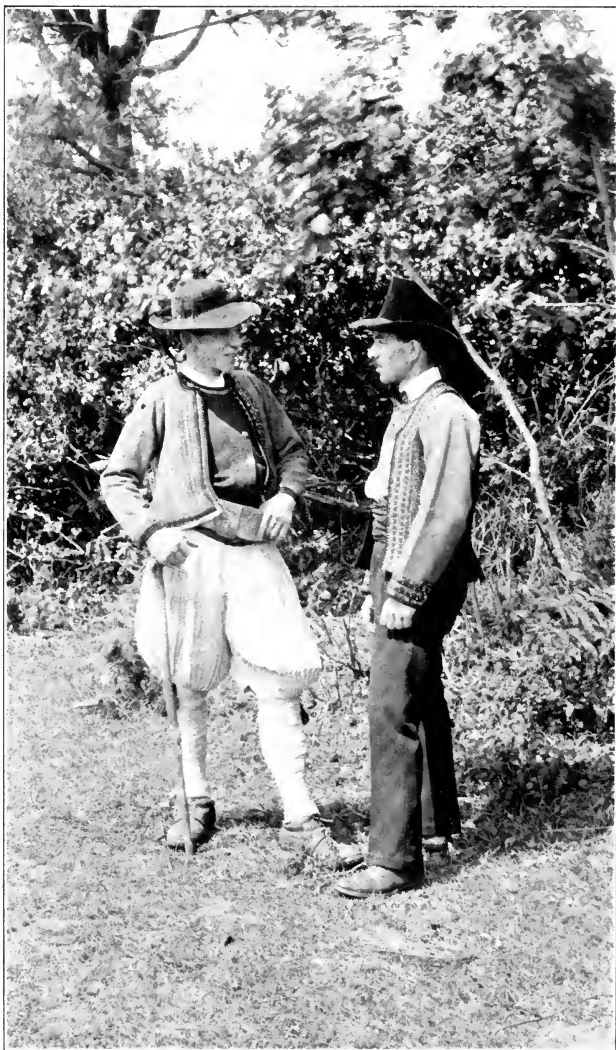
Price, \$1.25 and \$1.50

According to size

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's



FRENCH PEASANTS

Made with a 3A Kodak; $\frac{1}{2}$ second, stop 16



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES 5 CENTS

VOL. X

JULY, 1923

No. 9



An effective way of picturing Fishing Trophies

TELLING FISH STORIES WITH A KODAK

BY DAN McCOWAN

Illustrated by the Author

ONE evening, as I watched a near neighbor of mine, who lost an arm at Vimy Ridge, develop a roll of film in a Kodak Film Tank, I asked him what was

really the most difficult thing he had tried to do. "Well," he said, evidently forgetting the inconvenience of having but one hand, "Until I possessed an Autographic

Kodak I found it very hard to tell a fish story successfully. Ever since the time of Jonah, fish stories, which have not been corroborated by photographic illustrations have been regarded with suspicion."

The modern angler, carrying an Autographic Kodak, need not fear he will be proposed for membership in the Ananias Club, when he indulges in fishing reminiscences, for he can obtain reliable records of his prowess with rod and line and afterwards tell his fish stories with pictures that prove his statements.

I have seen so many pictures of fish strung on a line or a sapling, and held up so that every item of the catch could be seen—a combination which looked more like a pictorial record of the labor incidental to the weekly wash day than a reminder of a happy day spent with rod and line—that I wish to

call attention to another way of photographing fish.

All fish should be photographed as soon as is practicable after they have been taken from the water, as they are then more brightly colored than they are after several hours exposure to the air.

Unless it is more important to show the whole catch than the beauty and size of the fish, only a few should be included in one photograph. One or two specimens, arranged on a suitable background, will produce a much more pleasing picture than a lot grouped together. A reel, a hookbook, or the handle of a fishing rod laid beside the fish will add greatly to the pictorial effect, and will serve as circumstantial evidence that they were caught with rod and line. It also gives added eloquence and point to the story. The background may be a smooth rock, a bed of fine gravel



Splendid subjects badly pictured

or sand, or a grassy bank by the side of a stream.

The camera should, if possible, be held directly over the fish with the lens pointed straight downwards. If a Kodak Portrait Attachment is used the distance from the lens to the fish must be measured with a rule or tape line, and the focusing indicator set on the particular distance mark on the focusing scale that the portrait attachment instruction sheet states is correct for that distance.

The exposure should not be made with direct sunlight shining on the fish. In such a light there is a glitter from the silvery scales which partly obscures the fine markings.

EDITOR'S NOTE—For making a picture similar to the one shown on page 3 it is obviously necessary to point the camera downwards, unless a steep bank is available for a background. The camera can be pointed downward by driving a stick, 6 or 8 feet long into the ground and attaching the camera to this with a Kodapod. The Kodapod has toothed jaws that will grip a stick firmly, and it also has a ball and socket joint which permits the camera to be swung to right or left, or upward or downward, as desired. An Optipod can also be fastened to a stick, as well as to any tripod. When attached, by the regular tripod screw, to the top of a tripod, the Optipod permits



BOBBY

Made with a No. 3 Kodak

the camera to be pointed in any direction, even straight upward or straight downward.

Mr. McCowan advises against photographing fish in bright sunlight. Open shade, that is shadows that are cast by the sun, which have nothing but the sky above them, can usually be found, during the morning and afternoon hours, where tall trees or buildings or bridges stand. In such sun shadows, and also everywhere under the open sky on cloudy-bright days, an exposure of $\frac{1}{5}$ second with stop 16 on rectilinear and anastigmat lenses will be ample. With single lens fixed focus cameras, like the box Brownies, a 1 second exposure with the third stop should be given.

THE CONTRAST OF VELOX PAPERS DESIGNATED BY NUMBERS INSTEAD OF BY NAMES

THE introduction of a grade of Velox paper that is capable of rendering a longer scale of tones than the grade which has long been known as Special, has made it desirable to designate the relative degrees of contrast of all

the grades of Velox by numbers instead of by names.

The softest, least contrasty grade will be known as Number 1, and the hardest, most contrasty grade will be known as Number 4.

No. 1, the new grade, is intended for negatives of excessive contrast.

No. 2, (formerly Special), is for negatives of normal contrast.

No. 3, (formerly Regular), is for negatives of little contrast.

No. 4, (formerly Contrast), is for negatives that are so lacking in contrast as to be "flat."

Following is a list of grades, surfaces and contrasts of Velox as now supplied.

SINGLE WEIGHT				VELOX			DOUBLE WEIGHT		
Degrees of Contrast				SURFACE	GRADE	COLOR	Degrees of Contrast		
1	2	3	4	Semi-Gloss	VELVET	White	2	3	
	Smooth			PORTRAIT	White				
1	2	3	4	Matte	CARBON	White	2	3	
	Enameled			GLOSSY	White				



A NEW GRADE OF VELOX PAPER

IN printing from portrait negatives many prefer that the strongest lights on the face should be rendered by a tint, instead of by a blank expanse of white. Others prefer to have the strongest lights rendered white, with all the lesser lights tinted, and all photographers desire to have detail recorded in every other tone, except the darkest shadows.

In printing from landscape negatives that record clouds in the sky, everyone wishes to have these clouds show in the picture, without having the landscape rendered too dark.

Unless the contrast in the nega-

tive is so extreme that the negative needs reducing with a flattening reducer (persulphate of ammonia) the results we have mentioned can be secured by making the prints on Number 1 Velox, a new grade of paper which can render a longer scale of tones than any of the other grades of Velox.

Number 1 Velox is not, however, suited for all kinds of negatives. It is only adapted for negatives that have too much contrast for making pleasing prints on Number 2, formerly known as Special Velox.

Number 1 Velox is made in Velvet and Glossy, and only in the single weight.



"AW, GIMME A BITE"

Made with a 3A Kodak, by Edgar S. Smith



NUMBER 1—*Chipping Sparrow*

WHEN CRADLES ROCK IN BIRDLAND

BY HOWARD TAYLOR MIDDLETON

Illustrated by the Author

WHEN orchards are huge bouquets and woodland trails are sweet with the fragrance of trailing arbutus and wild violet, the nature lover's interest centres upon the return of the migratory songsters and, if he be a photographer, plans will surely be laid for the enhancement of his collection of bird portraits.

I seldom use a tripod when photographing birds on nests, because the nest is often too high and most birds are less apt to be frightened at a one-legged box than a three-legged one. I prefer to use a clothes pole, appropriated from the laundry, and find it to be exactly what I need. This pole I cut in two

and after placing the halves in contact I bore holes through them at 4-inch intervals. Then I fit the top of the half that had a pointed base, with a collar of metal. (Tightly wrapped strands of wire will do as well.) This protects the pole from splitting under blows from the camp axe while being driven into the ground.

Three 12-inch pegs, pointed at one end, with a hole for a cord near the other end, a Kodapod, two spools of white thread (*white*, because that color is easily seen and is not apt to be pushed against accidentally) and a ball of stout cord complete my outfit.



NUMBER 2—*Food for the Babies*

In a worm-eaten currant bush in my garden I found a chipping sparrow's nest. As this was not more than 4 ft. from the ground, one section of the pole held the camera high enough.

Knowing the "chippy" to be of a very confiding nature, I made no attempt to conceal the outfit from the bird, as would be necessary for photographing more timid species.

The fact that insects were rapidly devouring the foliage of the currant bush, suggested that soon there would be an entire lack of shade for the three delicate fledglings, and this sometimes proves fatal. Young birds, particularly before their feathers have sprouted, are extremely sensitive to heat, and when shade is lacking one of the parent birds is compelled to be in attendance, almost constantly, to protect the babies from the heat of the sun.

In picture number 1, we see the mother bird shielding her young by covering them with her body, and in number 2, after she had slipped away momentarily, father came



NUMBER 3 *On the Willow Branch*



NUMBER 4—*Song Sparrow*

with food. Exposure for both pictures, $\frac{1}{50}$ second with stop No. 4. (f.8.)

I found another chipping sparrow home in the crotch of a young willow by the garden wall. This

juvenile trio (three seems to be the popular number in "chippy" cradles) came through their babyhood in fine style, and are about to leave the nest. I placed them on a spray of willow, and when mother accommodatingly joined them, a third picture (number 3) was taken. Exposure, $\frac{1}{50}$ second with stop No. 4.

In the prickly heart of a climbing rambler rose bush, at a height of eight feet, I found a song sparrow brooding her three fully-feathered children. When photographing this bird it is necessary to resort to strategy. Madame Sparrow has no use for visitors, departing from her nest immediately when one approaches it, and refuses to return while anyone is near. Past experience, when dealing with feathered ladies of similar temperament, taught me what to do. I erected the pole before the nest, but instead of placing the camera in position, I



NUMBER 5—*Eager for More*

NUMBER 6—*Yellow Warbler*

bedecked the pole top with an ancient coffee pot salvaged from a nearby dump. Then I kept away from the nest for the rest of the day so that the bird might grow familiar with the strange object so near her home. Next day I returned and found the mother on her nest and very much less afraid.

Now, with one exception, the thorny branches surrounding the nest, were pulled aside and tied with cord. Only one spray was left in place to protect the babies from sun glare during the mother's absence. A cord was attached to this branch, to be pulled when the parent bird returned to the nest.

When the camera took the place of the coffee pot on the pole, it swayed in the breeze. To overcome this difficulty, I brought the sharpened pegs into play. They were pushed into the earth at equal distances apart, one in front and

two behind the camera, and a cord was run to each from the top of the pole. This accomplished, the outfit was as rigidly set as though a gigantic tripod had been used.

Having set up the apparatus I retired to await the return of Mother Song Sparrow. Soon a movement in the thicket back of the nest was followed by the appearance of the bird, who stepped daintily forth and snuggled down upon her children, covering them with her fluffy breast. The cord attached to the protecting branch was pulled gently, exposing the bird and nest to bright sunlight. Mother Sparrow stirred and raised her head at the slight rustle, but did not leave. When she again became quiet, the shutter thread was drawn taut, and picture number 4 was procured.

NUMBER 7—*Yellow Warbler Babies*

Number 5 shows the song sparrows on an apple bough, in partial shadow.

In a fringe of elder bushes bordering the Rancocas, during spring-time and early summer, there are always many cradles of the yellow warblers. Their nests are composed of plant down and finest hair and grasses, and are as exquisitely wrought as the jewel casket of a Princess. A portrait of Mother Warbler and her babies is shown in number 6.

Number 7 shows a pair of young warbler twins. These little chaps are fully feathered and tomorrow they will spread their wings in flight, bidding good-bye forever to their plant down cradle in the elders. Exposure $\frac{1}{50}$ second with stop No. 4, bright sunlight.

Deep within the dusky twilight of the woods, I found a lovely wood thrush brooding her eggs of greenish blue. As this bird rarely shows fear at the approach of the camera, I decided upon a time exposure. The picture (number 8) was taken by the thread method, one pull opening the shutter, a second closing it. Exposure 5 seconds with No. 4 stop, in deep shadow.

When you are preparing to photograph nesting birds be sure never to cut away the leafy shelter of a nest. If you do, it will not only cause the occupants to suffer and, perhaps, finally perish from exposure to the elements through the loss of Nature's umbrella, but it will make the nest conspicuous, and an easy prey to marauding cats, hawks, and weasels.

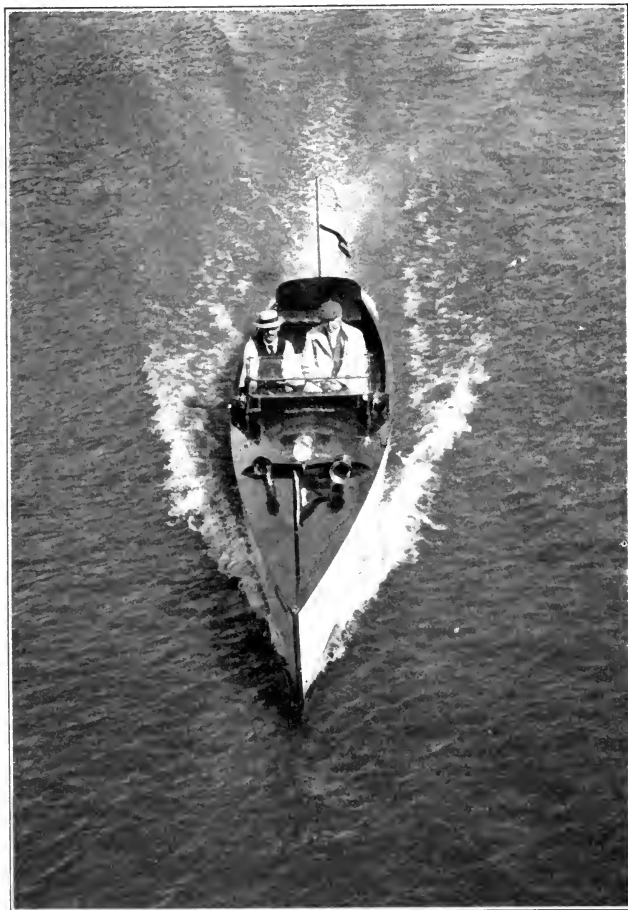


NUMBER 8—Wood Thrush

After the pictures are taken, always remove the cords and allow the branches to assume their original positions; in other words, leave things exactly as you found them. This is one hard and fast rule, which is obeyed to the letter by every conscientious bird man. Picture in your mind's eye a nest-full of fledglings burned to death by the rays from a scorching sun, and you will never forget this rule.



By placing a Kodak Portrait Attachment, or a Kodak Diffusion Portrait Attachment, in front of your lens you can photograph objects that are less than 6 feet from the camera.



A MARINE EXPRESS

*Enlarged from a Vest Pocket Kodak Negative with a
Kodak Auto Focus Enlarger*



Camera Pointed Up



Camera Held Level

JOE AND JERRY TILT THE CAMERA—ONCE

SINCE a magnanimous uncle had sent Joe a Brownie camera, he and Jerry could easily agree on a suitable occupation for any nearby time. But when their more distant futures came up for discussion, loud was the argument, and long.

Joe, who was determined to be a surveyor, couldn't understand Jerry's ambition to drive a fire truck. But the ten-year-old eloquently defended the career of his choice.

"I'll be at every fire—just slide down the pole, jump onto the truck and go like lightning. Tom Lee, the chief, has promised me the job," beamed Jerry.

Around the corner from the firehouse a new pavement was in process, so both boys could train for

their respective professions without separating far. While Joe watched the survey crew set grade stakes, Jerry attended the polishing of the big fire engine motors or looked on at the horseshoe game in the alley.

"Seems like we ought to make a picture of the firehouse," Jerry once suggested to Joe.

"Maybe we can some day," Joe agreed, "but I've got to keep the camera right with me in case anything happens on the paving job." Whereupon Jerry suggested that since the pavers didn't work on Sunday, the firehouse could pose for its picture then.

Joe's Uncle Ed had said at the start that the way to get good pictures is to follow the instructions given in the manual. The

manual tells what to do and what to avoid, so that no amateur need depend on his guesses. But the boys forgot their valuable little booklet on the bright Sunday morning when they sallied forth to photograph the firehouse.

From his position in the middle of the street in front of the building, Jerry discovered that the image in the finder included too much foreground and too little firehouse—the top was cut off. So he did what seemed the natural thing—he pointed the camera upward until the whole building was shown in the finder. Then he pressed the exposure lever, wound up the film and continued with Joe on the way to Sunday School.

Right in the middle of the lesson Joe pinched Jerry and whispered, "You didn't hold the camera level."

"Sure not, the building was too tall."

Further discussion was impossible because the teacher objected to the introduction of such modern problems into the study of ancient Hebrew history. But after dismissal Joe recalled to Jerry how the manual shows that when the camera is pointed upward the subject tapers toward the top.

"But how's a fellow going to get the whole thing into the picture?" Jerry asked.

"All you have to do is hold the camera higher," explained Joe. "Let's take another."

This time, standing on a barrel, confiscated from a nearby alley, Jerry found that he could get the entire establishment without tip-

ping the camera. Then he knew that the sides of the firehouse would be parallel in the picture.

Just before dinner, a few evenings later, Jerry's father, halfway through his newspaper, declared, "The council ought to do something about fires."

"Sure, they ought to fix it so there wouldn't be any fires at night or during school hours. Then a fellow could see them all," Jerry suggested.

"I certainly wish that the school bell would attract you like the fire bell does," said Jerry's father. "If you were a girl we'd name you Pyrene."

"Joe and I took some pictures of the engine house"—Jerry made the mistake of handing over both prints.

"First rate," was the father's comment on the good picture. But when he saw the one that was made with the camera tilted he said, "Merciful heavens, Cheops must have put up the East End fire station." Which proves that Jerry's dad knew who built some of the pyramids of Egypt.



An under-exposed negative is lacking in detail. From such a negative we cannot make a print that will show more detail than the negative contains.

An under-developed negative lacks contrast. Number 4 (formerly Contrast) Velox records more contrast than the negative shows.

MEMORIES OF CHILDHOOD

PERPETUATED BY



Made with a 1A Kodak Jr.



Made with a Kodak



Made with a 3A Special Kodak

HOOD'S PASTIMES

AKS AND BROWNIES



Made with a No. 3 Kodak



Made with a 2A Brownie



Made with a 2A Brownie



GROUP 1

All subjects in which the objects of interest are more than 500 feet from the camera should be classed in Group 1

THE EXPOSURE TO GIVE FOR OUTDOOR SUBJECTS

To many beginners in photography exposure is a problem, but fortunately, everyone, even those who have never used a camera, can quickly learn the correct exposure to give for all ordinary outdoor subjects. The way to do this is, first to class the subjects in four groups, and then give the exposure that is correct for the group in which the subject belongs.

By examining our illustrations, each of which bears the number of the group in which it is classed in the accompanying exposure tables, you can readily decide in which group the outdoor subject you wish to photograph should be

classed and then, by giving the exposure recommended in the table that applies to the type of camera you are using, you should have no difficulty in obtaining a negative from which good prints can be made.

If the camera has a double lens (which will be either a rectilinear or an anastigmat), use the table on page 20.

If the camera has a bellows which folds up, and a single lens, with stops marked 1, 2, 3 and 4, use the table on page 22.

If it is a box camera, which has only one shutter speed, and has no bellows, use the table on page 23.



GROUP 1

The only vessels that should be classed in Group 1 are those that are more than 500 feet from the camera. Bouts close to shore, or close to the camera should be classed in Group 2.



GROUP 2

A typical landscape scene, showing sky, with prominent foreground objects. Though distant hills show in this picture the interest centres in the foreground.

The exposures recommended are neither the shortest nor the longest that will give good results with Eastman film, the latitude of which is so great that it will take care of any reasonable error in exposure. They are averages that have been obtained from a comparison of thousands of exposures, and they are as good for use on sunny days in winter as on days of summer sunshine.

When the day is cloudy bright the exposures should be from two to three times as long, and when the day is dull the exposures should be from four to eight times as long as those mentioned in the tables.



GROUP 2

Subjects like the above, which are less than 500 feet from the camera should be classed in Group 2

OUTDOOR EXPOSURE TABLE FOR CAMERAS THAT HAVE RECTILINEAR OR ANASTIGMAT LENSES

For 2½ hours after sunrise until 2½ hours before sunset on days when the sun is shining

	Shutter Speed	Rectilinear Lenses Stop	Anastigmat Lenses Stop
GROUP 1—Snow, Marine and Beach Scenes— Extremely Distant Landscapes . . .	1/25	32	f.22
GROUP 2—Ordinary Landscapes Showing Sky, with a Principal Object in the Fore- ground	1/25	16	16
GROUP 3—Nearby Landscapes Showing Little or no Sky—Groups, Street Scenes .	1/25	8	11
GROUP 4—Portraits in the Open Shade, not under Trees or the Roof of a Porch —Shaded Nearby Scenes	1/25	4	7.7 or 8



GROUP 3

Street scenes usually show more dark than light tones



GROUP 3

A nearby landscape showing very little sky



GROUP 4

As portraits are made at short range, the exposure must be longer than for more distant subjects

OUTDOOR EXPOSURE TABLE FOR FOLDING CAMERAS THAT HAVE SINGLE LENSES

For 2½ hours after sunrise until 2½ hours before sunset on days when the sun is shining

	Speed Shutter	Stop
GROUP 1—Snow, Marine and Beach Scenes—Extremely Distant Landscapes	1/25	3
GROUP 2—Ordinary Landscapes Showing Sky, with a Principal Object in the Foreground	1/25	2
GROUP 3—Nearby Landscapes Showing Little or no Sky—Groups, Street Scenes	1/25	1
GROUP 4—Portraits in the Open Shade, not under Trees or the Roof of a Porch—Shaded Nearby Scenes	1 second	4



GROUP 4

On cloudy days, country road scenes and ordinary landscapes, should be given as long an exposure as is recommended for Group 4

OUTDOOR EXPOSURE TABLE FOR FIXED FOCUS BOX CAMERAS THAT HAVE SINGLE LENSES

For 2½ hours after sunrise until 2½ hours before sunset on days when the sun is shining

- GROUP 1—Snow, Marine and Beach Scenes—
Extremely Distant Landscapes . Snapshot with Second Stop
- GROUP 2—Ordinary Landscapes Showing
Sky, with a Principal Object in
the foreground Snapshot with Largest Stop
- GROUP 3—Nearby Landscapes Showing Little
or no Sky—Groups, Street Scenes Snapshot with Largest Stop
- GROUP 4—Portraits in the Open Shade, not
under Trees or the Roof of a
Porch—Shaded Nearby Scenes . 1 second with Third Stop

To make a time exposure with a fixed focus Brownie Camera, draw out the time slide and, with cameras that have a time lever move the lever over to "T." It takes two movements of the shutter lever for making a time exposure—one pressure for opening the shutter and another for closing it.

It takes about one second to mentally pronounce "one hundred and one."

MOVING OBJECTS

While all of the combinations of stops and shutter speeds that are recommended in the preceding tables are eminently satisfactory for photographing stationary

objects, all of them are not adapted for photographing moving objects.

It is obvious that sharp pictures of moving objects can only be secured with short exposures. A good exposure rule, when using a compact hand camera for picturing anything that is moving, is to use the largest stop and give the shortest exposure that the camera can make. The subject must, of course, be in bright sunshine.

The risk of movement showing in a negative is lessened as the distance between the camera and the moving object is increased, and it is also lessened as the angle at which the object moves across the field of view is reduced. To illus-

trate: If the object is moving at right angles to the camera, at a speed of ten miles an hour, it should be photographed at a distance of seventy-five feet or more. If it is moving diagonally across the field of view it may be photographed at a distance of fifty feet, while if it is moving directly toward or away from the camera it can be photographed at a distance of about forty feet, with the assurance of equally sharp images of the object being obtained in each case.

The most pleasing pictures of moving objects are usually obtained when the subject is moving diagonally across the field of view.



DIFFUSED FOCUS PORTRAITS

It is universally recognized that the accuracy with which the photographic lens draws the lines of which a picture is composed has never been equalled by any other device.

Desirable as this accuracy is, there have always been photographers who have wished that correctness of drawing would not, in all cases, be combined with sharpness of line. They contend that sharp lines should only be used for picturing inanimate objects, and that, though the lines in portraits should be accurately drawn, they should have diffused instead of sharply outlined edges.

Many methods have been tried for making diffused line portrait

negatives with the lenses that are regularly fitted to hand cameras, but, until recently, no device was available that gave accuracy of drawing, and also diffusion, without "fuzziness."

Correct drawing is absolutely essential to good portraiture, but lines can be as correctly drawn with diffused as with sharp edges.

A little diffusion produces a pronounced effect in portraiture. It lends a charm to the wrinkles and the character lines—those facial markings which everyone recognizes must be left in the portrait if it is to be a truthful likeness of the one who possesses them—but which no one likes to see sharply drawn.

Another important effect of diffusion in a portrait is to make the face appear rounder than it does when every line, and even the pores of the skin, are sharply rendered.

Many, whose impressions of diffused focus portraits have been gained from examining "fuzzy-types," in which every line was blurred instead of being diffused, have expressed the opinion that diffused lines might be suitable for an angular or a wrinkled face, but were wholly unsuitable for a smooth skin or a well rounded face.

The subject of our illustrations was selected for showing that a smooth and well rounded face can be pleasingly pictured with diffused lines—when a suitable diffusing attachment is used in combination with a regular hand camera lens.

The sharp picture on page 26 was made by placing a Kodak Portrait Attachment in front of the lens of a 3A Kodak. The diffused focus picture on page 27 was made by placing a Kodak *Diffusion* Portrait Attachment in front of the same 3A Kodak lens.

In comparing these pictures observe what diffusion did to the collar of the girl's coat—how much softer and more like fur it appears than it does in the sharp picture. The hat is also more pleasingly rendered.

The most important part of a portrait is, however, not the costume, but the face, and the test of diffusion must be based on the way that the features are rendered. Compare the faces in these pictures and note how much the lines of the

eyelids and the lips are softened by diffusion, thus showing more nearly what we see when we look at people than what the unassisted camera lens usually renders. Both pictures were reproduced from negatives that had not been retouched or "doctored" in any way whatever.

This attachment is used in exactly the same way as the well known Kodak Portrait Attachment. It is mounted in a hood which slips over the hood of the regular camera lens, so that it can be quickly put in place and as quickly removed.

It is, like the Kodak Portrait Attachment, only intended for close-up work, such as making portraits and photographing objects that are less than 6 feet from the camera.

Since this attachment does not affect exposure the same exposure that is correct when it is not used will be correct when it is used.

A feature of especial value is that the amount, or degree, of diffusion it will produce depends on the size of the lens stop used. With the largest stop it will give the maximum diffusion. With the smallest stop it will give no diffusion at all.

The utmost diffusion it will produce is a little more than that shown by the picture on page 27. This was made with the *f.8* stop on an *f.6.3* lens.

The Kodak *Diffusion* Portrait Attachment is made to fit all models of Kodaks that are now manufactured, from the Vest pocket to the 3A size (excepting the Stereo and the Panoram) and also all of the Brownie cameras.



Made with a Kodak Portrait Attachment that was placed in front of Regular Camera Lens



Made with a Kodak Diffusion Portrait Attachment placed in front of the lens that made the picture on opposite page

SERVICE DEPARTMENT TALKS

CARE OF NEGATIVES

NEGATIVES that were thoroughly fixed and then thoroughly washed will undergo no change with the lapse of time, provided they are properly taken care of.

As negatives will absorb chemicals from ordinary paper in damp weather they should never be filed between the leaves of a book, between sheets cut from newspapers, or left in contact with ordinary wrapping paper.

Negatives may be safely filed in boxes, with nothing between them, or, better still, in Eastman Film Negative Albums, which contain bound envelopes that are made of a special paper.

Never handle negatives with wet or perspiring fingers. Finger marks are difficult to remove, and they will usually show in the prints.

Never touch the face of a negative, if it can be avoided. Handle films by the edges, which are outside the picture area.

By observing the precautions we have mentioned and always keeping negatives in a dry place, free from dust, they will remain in perfect condition indefinitely.

Should you desire specific information regarding any branch of amateur photography with which you are not familiar, write to us. We will be glad to assist you. There will be no charge.

Address all communications

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED

TORONTO, CANADA



As you slide the camera up and down the image size changes but the focus stays sharp.

Kodak Auto-Focus Enlarger

Accommodates any negative up to 4 x 6 inches in size and makes prints on Bromide paper from 1½ to 3½ times its dimensions. Maximum enlargement, 14 x 21 inches.

ENLARGING with this capable apparatus is positive pleasure. By eliminating focusing it enables even the novice to make enlargements with virtually the ease of contact printing.

Kodak Auto-Focus Enlarger complete with six metal masks, negative and paper holder, and electric cord and plug but without the Mazda lamp required for illumination \$40.00

Diffusing Disc for soft focus effects 1.00

There's a new edition of "Large Pictures from Small Cameras," a free booklet on enlarging for the amateur. Ask for a copy from us or your dealer.

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

What Real Tests Tell

KODAK FILM is under frequent drastic tests in our laboratories in comparison with all other makes of film.

These tests prove that it is unequalled in speed; that no other film provides so wide a latitude for error in exposure or keeps so well under trying conditions.

Kodak Film—the Dependable Film in the Yellow Box.

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



You'll *keep* your prints in a
KODAK ALBUM

PICTURES of your holiday excursions, week-end trips, summer vacation, are too precious to neglect. Tucked away in desk or drawer you'll soil and lose them—in a Kodak album you'll keep them and keep them neat and clean. Each page will help you enjoy the fun again.

Price, 20c. up

KODAK DRY MOUNTING TISSUE—Provides the most satisfactory means of mounting prints. No curling, no turned up corners, no muss. Just lay tissue on print, place print on album leaf and press with a warm flat iron. Price, 15 cents per package of one, two or three dozen sheets according to size.

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

Adaptable for use in any plate holder—

Kodak Cut Film

FROM the point of physical properties compare cut film to glass plates: It weighs but a fraction as much, takes up decidedly less space, is unbreakable and easier to handle. Yet it provides a firm, flat support for the emulsion.

Compare them from the point of photographic properties: Cut film is strictly non-halation, has a long scale of gradation and allows wide latitude in exposure. Regular Kodak Cut Film has the speed of fast plates, while Kodak Cut Film *Super Speed* is emphatically faster.

Through the agency of Kodak Cut Film Sheaths Kodak Cut Film, either regular or *Super Speed*, can be used in any plate holding camera including both regular and *Special* models of the Nos. 3 and 3A Kodaks equipped with the Combination Back.

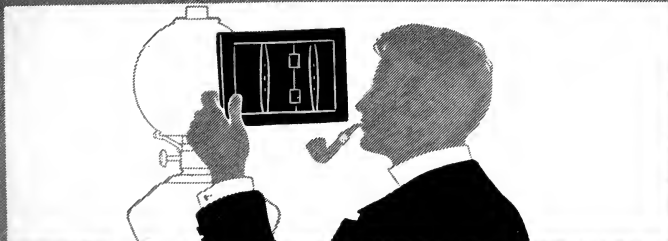
PRICES

	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, doz.	\$0.45	\$0.65	\$0.90	\$0.90	\$1.45
Kodak Cut Film <i>Super Speed</i> , doz. . . . .	.50	.75	1.00	1.00	1.60
Kodak Cut Film Sheath, each . . . . .	.12	.12	.18	.18	
Eastman Film Sheath No. 3 . . . . .					.30

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's



Prints by Gaslight

A grade for every negative

VELOX

No. 1 for very contrasty negatives*

No. 2 for average negatives
(Formerly "Special")

No. 3 for flat, weak negatives
(Formerly "Regular")

No. 4 for extremely flat negatives
(Formerly "Contrast")

*A new degree of contrast made extra soft to reproduce detail in shadow as well as highlight from negatives that show extreme contrast.

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

All dealers'

A New Model Kodak—

Just in time for the holidays

No. 1 Pocket Kodak Series II



By means of the Self Erecting Front the fixed focus lens of this new Kodak springs into position as soon as the bed is dropped.

The Kodak slips into the pocket with space to spare and gives you pictures—good pictures of $2\frac{1}{4}$ x $3\frac{1}{4}$ size—with a convenience heretofore unknown.

The lens is carefully tested and the Kodak Ball Bearing Shutter with adjustable snapshot speeds of $\frac{1}{25}$, $\frac{1}{30}$ and $\frac{1}{60}$ second is reliable and accurate. The autographic attachment is countersunk so the hand may have the flat surface of the camera back as a support while the date and title are noted.

Price, \$13.50

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

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KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



AUGUST 1923



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

Modernizes amateur enlarging



Kodak Auto-Focus Enlarger

THIS up-to-date apparatus commands instant interest for the new convenience it brings to amateur enlarging.

The effort of finding the focus belongs to the past. As you slide the camera up or down to change the image size you know the image is sharp—automatic mechanism constantly maintains correct focus.

Kodak Auto-Focus Enlarger accommodates either film or plate negatives up to 4 x 6 inches and makes prints on Bromide Paper up to 14 x 21 inches. Complete with Kodak Anastigmat Lens, negative holder, paper holder, set of flexible metal masks in six sizes and electric cord and plug; but without the Mazda lamp required for illumination.

Kodak Auto-Focus Enlarger \$40.00
Diffusing Disc for soft focus effects 1.00

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your Kodak dealer's

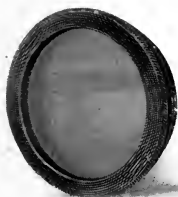
For pictures out of the ordinary

Kodak Portrait Attachment



SLIP this attachment over the camera lens, place the subject close up, and expose as usual. It permits sharp focus at short range—head and shoulder portraits, for example.

Price, 75c.



Kodak Color Filter

A WORTHWHILE aid for photographing colorful subjects—flowers, for example. By darkening the rendering of blue and lightening the rendering of yellow it gives a reproduction of these colors more nearly as the eye saw them than is otherwise obtainable.

Price, 75c. to \$1.50

According to size

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

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WE THREE
Made with a 3A Kodak Jr.

KODAKERY

A Journal for Amateur Photographers.



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. X

AUGUST, 1923

No. 10



Made with a 3A Kodak Jr.

IMPROMPTU PORTRAITS

BY ALBERT CRANE WALLACE

I DON'T mean "impromptu" in the sense of those speeches that are supposed to be impromptu but that have been fixed up long before. Mark Twain said that he could make his best impromptu speeches with two weeks' preparation.

No, I mean impromptu—the real thing. I mean portraits that just happen, like any sudden thing that has an interest for us because we

didn't prepare, that is, perhaps, a sort of surprise.

Of course, most of the best things we do may be done by preparation—not excited or nervous preparation, but by a natural ease of getting ready and thinking out beforehand. It would be a mistake to depend on chance, never to go about making a picture or anything else with a plan and purpose. Really artistic things are usually



Made with a No. 2 Brownie

done with a plan. I say, *usually*. But every artist knows enough to have room for impulse, and every artist knows enough to take advantage of chance—of accident, if you care to put it that way. Some of the best effects cannot be planned. Suddenly they are there to be caught, and we can catch them if we are quick about it.

A series of pictures such as illustrate these lines will prove the truth of what I am saying. They prove the charm of portraits that are informal, that don't look studied out.

When I began with photography I not only took it seriously but *solemnly*. I arranged my portraits very carefully—and they usually looked it. I can remember a picture of my elderly aunt in which I tried to obey all the rules. She looked at the print steadily for a

moment. Then she turned to me. "Isn't it *awful!*" she said. I had a picture but I didn't have my aunt. Before long I began to understand that a sitting could look very set. The great point was to get both a picture *and* the person.

If this is difficult with a grown-up it is ten times more difficult with a youngster. A "fixed up" picture of a child seems to be worse than an artificial picture of a man or woman. This is why modern portrait photography is more and more disposed to go about portrait making, even in a studio, without stiff arrangements—why it "snaps" when the subject isn't thinking about it. To the amateur who works by a window or out-of-doors



Made with a No. 2 Brownie



IN DAISY-TIME

Made with a No. 3 Kodak

the privilege of being "off hand" is particularly welcome. Of course, no preliminary pains are wasted if everything goes right—and if the subject doesn't feel the weight of all the fixing, which he or she so often does.

The impromptu portrait, then, has this in its favor, that the photographer isn't tired or nervous as a result of preparations, and the subject isn't stiffened up by trying to "look the part." An ordinary snapshot doesn't seem to a young-



Made with a No. 1 Kodak Jr.

ster, for example, as important as a prepared-for picture, and because it doesn't seem important the youngster feels natural—perhaps taking the affair as a little joke. Probably we all look better in the middle of a joke than we do in the

middle of a sum in arithmetic. So there you are!

I am very fond of art, but I am fonder of children. I like the art that happens to bring before us human beings as we know them. I find myself liking photographs of



Made with a No. 2 Folding Brownie



Made with a 3A Kodak Jr.



Made with a No. 2 Folding Brownie



Made with a No. 3 Kodak

people better than paintings of people because there is so often more reality in the photographs. But the painters will scold me for this.

The great point is that the most popular picture of a person is the picture that gives the happiest impression of that person, and the impromptu portraits, made when the subject is in a favorable mood, are very likely to catch this happy

expression. The picture may not be a surprise, but it will be made freely and easily—or seem to be—and this will have its effect.

We have come to the season when all outdoors is a portrait studio. Nature has painted the scenery. Gardens and lanes and lakesides are settings—even a back yard can be a wonder garden in the summertime,



THE FISH STORY

TELLING THE STORY WITH YOUR KODAK

BY HARRY C. PHIBBS

Illustrated by the Author

THE portraits and the story-telling pictures which you have preserved in your album always remind you of the events that transpired at the time when the shutter was clicked.

Have you ever shown your pictures to friends and found that they looked at them with a bored air of indifference? If so, the reason is that the prints, which may be good as photographic records, and may also be very interesting to you and to the people who posed in them, meant nothing to others, because they were merely a collection of photographs of one or more

people smiling vacantly into the lens.

Pictures of the same subjects would have interested all who saw them if you had made the Kodak "tell the story."

Making a picture tell a story is by no means difficult. It does, of course, require a little thinking on your part before you make the exposure and, if the subjects know that you are going to make the picture it requires a little co-operation from them, but the result is well worth while.

There is a story in every little jaunt, in every picnic or other

social event. Simple perhaps, but it is the simple stories that are the most interesting. Record such stories with your Kodak and you will have pictures that you will be proud of, and pictures that will interest all who see them.

Just to show what I mean let's join those two young people as they walk through the woods. They wish to be photographed, of course. A common procedure is to pose the pair, then say something that will make them smile, and snap the picture at a moment when they are smiling a sheepish grin into the lens. Let's avoid this method and make the picture tell a story.

They are sweethearts taking a stroll through Lover's Lane. An old fence and the shade of a tree form the setting. We ask the girl to lean against the fence and request her companion to place his hand on the fence post and lean forward while he engages her in conversation. The sun is shining brightly, but as the subjects are in the shade of the trees, we must give plenty of exposure. $\frac{1}{10}$ second with stop No. 4 and the result is "Lovers Lane."

This is a charming road, by the way, and it proves a happy hunting ground for the Kodaker. Three little rascals trot up, evidently bent on snaring finny treasures with a worm on a bent pin.

"Hold on there, boys; a nickel to pose for your picture. Look at each other

as if you were telling about all the fish you are going to catch." As the boys were in the sunlight a $\frac{1}{25}$ second exposure with stop No. 4 resulted in the picture entitled "Three Little Fishermen."

Some yards farther on two interesting little chaps are playing in the grass. We tell them to look at the bird in the tree. These boys are also in the sunlight, so a $\frac{1}{25}$ second exposure with stop No. 4 is sufficient. The result is shown in "What Bird is That?"

We tramp along hunting more pictures, when we see a Boy Scout Camp, about which are pup tents, canoes and scouts. The scouts are all Kodak fans, too, and enter into



LOVERS' LANE



THREE LITTLE FISHERMEN

the spirit of the thing. We ask them what they were doing when we came along.

"Oh, Mac here was telling lies about a fish he didn't catch."

That's the story. "Come on Mac,

show them how big the fish was and don't look at the camera."

There is fine bright sunlight and it is now noon, so we give another $\frac{1}{25}$ second exposure with stop No. 8, and capture "The Fish Story."



"WHAT BIRD IS THAT?"

On returning home we find that brother and his gang are out in the back lot taking chances at spoiling their new suits by poking in the mud for something. Note how interested they are. It is at such a moment that story-telling pictures should be made—the moment when the subjects are busy doing something. The same $\frac{1}{25}$ second exposure with stop No. 4 produced the picture entitled "The Buried Treasure."

You can apply this story-telling picture game to the snapshots you make to show how the youngster looks at different ages. Try and figure out the pose that will tell the typical story of the age or season.

When you make an effort to tell a story with your Kodak, you will find photography more fascinating

than ever and your pictures will contain a human interest element—that something which appeals to everyone.



THE INSIDE CORK

WHEN a two-compartment glass tube containing chemical preparations, is corked at one end only, with the other end closed like the bottom of of a bottle, the easiest way to get the chemicals out will be to remove the end cork, pour out the chemicals that are in the first compartment and then, with the point of a lead pencil, press down on one side of the cork that is inside the tube. This will turn the cork so that the chemicals that are in the second compartment can readily be poured out.



THE BURIED TREASURE

JOE AND JERRY GO IN FOR PORTRAITS

THE honourable old firm of Joe and Jerry had engaged in a wide variety of enterprises during its career thus far.

First was the J. & J. Messenger Service, then the ten cent dray, next a season of wild west shows, followed by a bottle-gathering venture.

And now they were busy making pictures with the 2C Brownie that Joe's uncle had sent him. As auxiliary equipment Jerry provided a Kodak Portrait Attachment, so that they could make portraits as close as $3\frac{1}{2}$ ft.

It was a big day for Joe and Jerry when Lucy Morris, ten year old belle of the vicinity, put on her new gingham dress and swaggered into Jerry's backyard, headquarters of the boy photographers, to have her picture taken.

"I can make a swell picture of you, Lucy," assured Joe.

"Sure we can," Jerry agreed. "We've got a portrait attachment and everything," producing from his pocket the very device, wrapped in an amazingly clean handkerchief.

"What does that thing do?" asked Lucy, anxious to understand the strange powers of this simple accessory.

"Oh, it makes you look big in the picture," Joe answered.

"But I don't want to

look big. I want to look just like I am," retorted Lucy, who was never altogether displeased with her style of beauty.

"You *will* look just like yourself, exactly," Jerry promised her. "All the portrait attachment does is change the focus so we can work close up. Then instead of showing all the boards in the side of the barn the picture will have just you in it."

"Of course you must know how to use it," said Joe, with a



Made without Kodak Portrait Attachment

mysterious air. "There's a lot in knowing how."

"The distance has to be just right—exactly three-feet-and-a-half. That's what this stick is for."

The boys had previously discovered that with the portrait attachment the focus is sharp only at the distance specified in the directions. So after Jerry's mother had demanded the immediate return of her tape measure, they sawed a $3\frac{1}{2}$ foot piece from a broom stick, of which there was always a big stock on hand for trapeze bars. With it they

were sure to get the distance right.

Since the attachment does not change the amount of light that goes through the lens, outdoor portraits are made with the same exposure that would be used for other nearby subjects.

Joe, to whom the camera really belonged, made the exposure. He didn't try another because he knew the first was right; he had measured the distance with the three-and-a-half-foot stick; he had centred the image carefully in the finder and he had held the camera steady when he pressed the shutter lever.

Jerry, however, wasn't satisfied with his minor role during the performance. For certain sentimental reasons he was especially anxious to appear of some importance before this particular patron. So he came forth with a suggestion.

"Now I'll make a picture without the portrait attachment, to show Lucy the difference. Joe did you wind the film?"

Joe confessed that he hadn't.

Jerry frowned. "Ought to wind a new film into place right after every exposure," he declared, with all the authority of the manual behind him. The breaks were indeed coming his way; Jerry was positively showing off.

Then he stepped back to a distance of about fifteen feet and made his exposure without the portrait



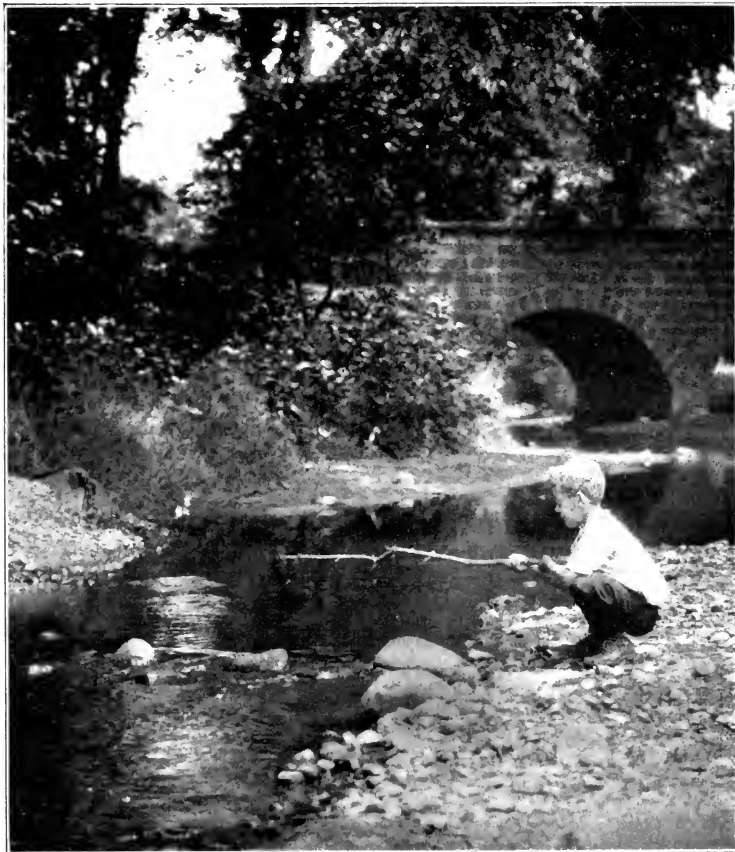
Made with Kodak Portrait Attachment

attachment, careful to locate the image properly in the finder and to hold the camera steady. He, too, was confident of success.

And it was Jerry again who sauntered up to Lucy Morris' porch a few days later with the prints. The fair Lucy was much

pleased with the portrait attachment picture. But she emphatically declared that she didn't want the other and wouldn't have it in the house.

"Lucy gave me this picture to keep," was the way Jerry reported the incident to Joe.

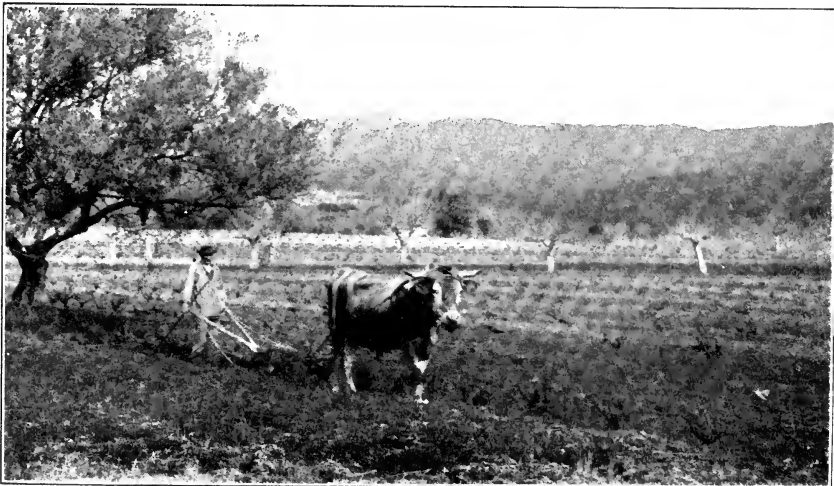
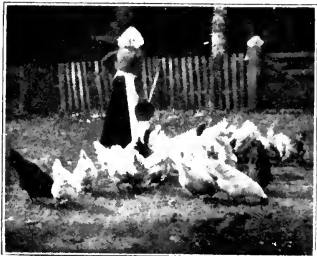


A GLORIOUS NIBBLE

Made with a Gaflex, by E. J. Brown

EXCURSIONS

THINGS T
IN OUT-



THE COUNTRY

KODAK SEES
OR RAMBLES





An extreme example of a Landscape Picture that has No Point of Interest

LANDSCAPE PHOTOGRAPHY

PICTURING landscapes is one of the simplest branches of photography; and it is because it is so simple, and the results are so certain, that more landscape records than landscape pictures are made.

We do not wish to criticise the making of landscape records. We make them ourselves, and intend to continue making them, as they are of interest and value to all who are familiar with the scenes portrayed. We wish, however, to direct attention to the desirability of making landscape *pictures*, whenever possible—pictures that will possess pictorial as well as record value, so that they will prove of interest to those who have never seen the subjects.

While records can be made anywhere, during any of the daylight hours, pictures that are more than mere records of scenes can only be made at places where it is possible to arrange a pleasing composition, and at a time when a good lighting effect exists.

Over the composition of a landscape picture we have but limited control. Since we cannot move the landscape fixtures—the trees, the hills, the water courses, etc.—we must compose our picture by viewing the landscape from different positions, and then photograph it from the position which presents the most pleasing view.

Over the lighting of a landscape we have no control whatever, as we must depend on the light that

comes from the sky, but as the lighting changes with the hours, we can select the hour when the lighting effect is most pleasing.

We all know that during the early morning and late afternoon hours the shadows of trees and other tall landscape objects are much longer than they are near midday, and we should take advantage of this fact, because long shadows have pictorial value.

Included in the foreground or middle distance of the scene must be some prominent object, which will be the chief point of interest in the picture. Unless there is a chief point of interest, to which the eyes of the observer are irresistibly drawn, the picture will lack pictorial quality. A severe example of

the absence of a chief point of interest is shown on page 18.

This picture was intended to represent a beautiful pond, surrounded by hills and trees. Had it been made to show the water and the shore line, from a position near the water's edge, with one of the large trees occupying a prominent position in the picture, it would have conveyed a more adequate idea of the beauty of the pond and its surroundings, and the composition would have possessed pictorial merit.

In picturing the interesting places along the banks of a stream, or along the shore line of a pond or small lake, it is sometimes desirable to have the view across the water included in the picture. In such



Pedestrians or vehicles will often furnish the needed objects for adding interest to country road scenes



Utilizing a boat for Balancing a Composition

cases the composition will be improved by making the picture from a viewpoint which shows a prominent object in the foreground or middle distance. If nature has failed to put one where we want it we can often supply the deficiency by placing a boat, or some other object where it will serve to convert what would otherwise be a record of a scene into a picture. The result of doing this is shown above.

Whether the picture should be horizontal or vertical can readily be determined by examining the subject in the finder. A comparison of illustrations on this and the opposite page will show the importance of paying attention to this.

An old rule tells us never to place the skyline in the middle of a composition, so that one half of the picture will represent what is above and the other half what is below the skyline. The accepted method is to place this line anywhere but in the middle. A high skyline gives prominence to the foreground, while a low one directs attention to the sky and the distant part of the landscape.

When water is a prominent feature of the foreground the picture should be made with the camera high enough, or low enough, that the dark as well as the light tones on the water can be seen. Water should never be rendered as a blank mass of white. If it is considerably ruffled by the wind we should watch for the little shadows on the waves. If the water is perfectly smooth it will reflect the tones of the sky, and also the clouds, if any exist. Perfectly smooth water will reflect the images of the tall objects that are near it, and thus give variety to the foreground



A Horizontal View of the subject shown on the opposite page. Always consider whether the subject needs a Horizontal or Vertical Framing

tones. The raising or lowering of the camera only a few inches will often make a great difference in the way that water is rendered. As we can always see the effect of raising or lowering the camera by looking in the finder it is a simple matter to secure the effect desired.

Landscapes are usually photographed with ordinary snapshot exposures. These are, $\frac{1}{25}$ of a second with stop 16 when rectilinear or anastigmat lenses are used, and, a pressure of the shutter lever on fixed focus box cameras. These

exposures are recommended for the period between $2\frac{1}{2}$ hours after sunrise and $2\frac{1}{2}$ hours before sunset—the greater part of the day. When making pictures in the early morning or late afternoon hours the exposures should be from 2 to 4 times as long as those mentioned. The way to do this with fixed focus box cameras that have but one shutter speed is to place the camera on a tripod, or some other rigid support, use the smallest lens stop and make the shortest time exposure that is possible.



CHANGE OF ADDRESS

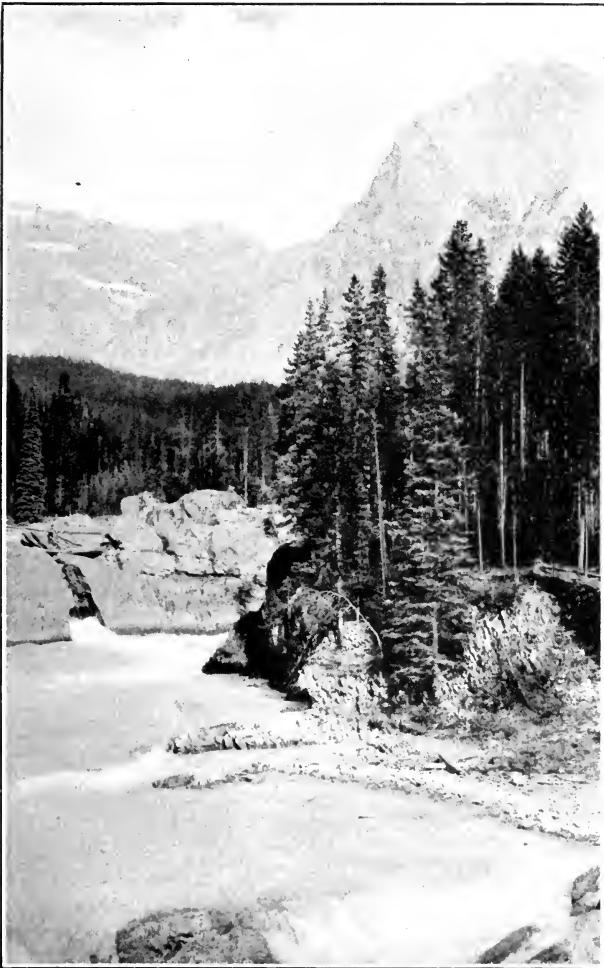
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A TYPICAL SCENE ALONG SMALL STREAMS

Note how the composition has centred the interest on the trees



THE MOUNTAIN STREAM
Made with a 3A Kodak

CARE OF PHOTOGRAPHIC SHUTTERS

Oil is an engine's best friend, but a photographic shutter's worst enemy.

Every photographic shutter has bearings, just as an engine, a machine or a watch has, but the bearings in a shutter work occasionally—usually for only a fraction of a second at a time, while the bearings in engines and machinery work continuously—often for hours at a time, and those in a watch work without stopping, for many months. Bearings that are constantly in action must, of necessity, be lubricated.

Photographic shutters are designed to work without lubrication, and oil, instead of helping, will, invariably, handicap them.

A high-grade watch has jeweled bearings while a shutter has not. A watch is carried in the pocket or worn on the wrist, where its temperature is kept fairly constant. If it were left in a very cold room for a few days, or exposed to sudden and severe changes of temperature, it would not keep time, for the oil in its bearings would thicken and make it run slow.

A photographic shutter is freely exposed to the temperature of the air, and it is taken from warm rooms out into low temperatures in winter, as well as into very high temperatures in summer. It is exposed to sudden and severe temperature changes and it is so constructed that changes in temperature will scarcely affect it. If it needed oil it would work much slower in cold than in warm weather and the photographer

would never know at what speed marking to set the indicator for securing the right exposure.

It is probable that more shutters are put out of order by oil than by accidents and all other causes combined, and, after a shutter has been oiled it always needs the attention of the makers.

The best care that can be bestowed on a photographic shutter is to keep its outsides clean and to let its insides alone. When this is done it will usually render good service for many years.



THE EIFFEL TOWER

Made by C. Randall Hammond with
a 1A Kodak Jr., f.7.7. lens

THE FUNCTION OF COLOR FILTERS

THE light of the sun is white. White light contains all colors. When a ray of white light is passed through a prism the light is bent, and as the colors are bent to different extents they are separated and some of them become visible. The colors we can then readily distinguish are violet, blue, green, yellow, orange and red.

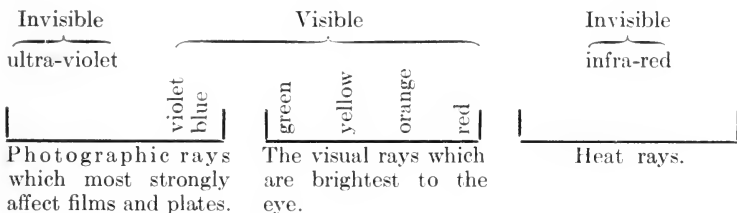
In addition to these, sunlight also contains kinds of rays that are ordinarily invisible, but some of which can, with special apparatus be made visible. These are known as the ultra-violet and the infra red. The infra red, being heat rays, are of no importance in photography, but the ultra-violet, which are light rays, are of very great importance.

The colors of which light is composed appear in the order shown in the diagram.

While all the colors pass through the lens and reach the film when we make an exposure by daylight, if no filter is used, and while the film would, if exposed long enough, be affected by all these colors, the film is so much more strongly affected by blue, violet, and ultra-violet that these latter colors impress the image of the subject on

the film long before the other colors can affect it, and, were we to expose the film long enough for the other colors also to affect it the negative would be ruined through excessive over-exposure. This means that when we make a negative on an ordinary film, of a subject illuminated by daylight, the image we obtain in the negative was made almost solely by the blue, violet and ultra-violet and this is why, when we use an ordinary film and photograph a landscape above which is a blue sky with white clouds and expose long enough for recording details in nearby objects, both the clouds and the sky appear white in the print.

In order to overcome this and make blue photograph darker than white we must use a film or plate that is affected by green and yellow *at the same time* it is being affected by blue, violet and ultra-violet. Eastman film, being orthochromatic (corrected for color), is affected at the same time by these colors, but, as all films and all plates, no matter how highly they may be corrected for color, still remain most sensitive to blue, violet and ultra-violet, these colors will affect them much more



strongly than the other colors can unless we subdue these colors by using an orthochromatic filter, through which the light must pass before it reaches the film or plate.

The function of an orthochromatic filter is, therefore, to prevent part of the blue and violet from passing through it, thus more nearly equalizing the effect the various colors have on the film or plate during the period of exposure.

Since the orthochromatic filter prevents part of the blue and violet from passing through, it cuts out part of the light that would affect the film or plate if no filter were used, and, consequently, it increases the exposure that must be given. The increase of exposure required depends on how much of the blue and violet the filter cuts out and also on how sensitive the film or plate is to the light which the filter lets through.

If we had a film, for instance, which had its sensitiveness in two equal portions, half the total sensitiveness being to the green, yellow, orange and red and half to the blue and violet, then, if we used a filter which cut out all the blue and violet and allowed all the green, yellow, orange and red to pass through, the exposure with the filter would be only twice that needed without the filter, but, if the sensitiveness of the film was only $\frac{1}{3}$ to the green, yellow, orange and red, and $\frac{2}{3}$ to the blue and violet the exposure with the filter that cut out all the blue and violet but passed all the green, yellow, orange and red would be 5 times that needed without the filter.

It is not desirable to make film that is intended for snapshot exposures strongly sensitive to red because if it were it would be too slow for present day requirements, even when no filter was used, and it would be very difficult to handle in the dark room. Tank development by daylight would be impossible. It would be fogged by even a very weak light; none but an experienced photographer could judge the density of the negative during development before the extremely dim special green safelight needed for tray development, and after tank development the film would have to be transferred to the fixing bath in a light-tight dark room and precaution taken against light reaching the film for some time after it was placed in the fixing bath.

From the foregoing it is evident that calling a filter a three times or a five times filter means practically nothing unless the conditions under which the filter is to be used are as stated.

When the Kodak Color Filter is used with Kodak film and detail is to be recorded in nearby objects, such as flowers photographed at short range, or dark colored landscape objects that are, say, less than 200 feet from the camera, the exposure should be 10 times as long as it should be if the filter were not used, but when the best rendering of white clouds in a blue sky is preferred to the recording of detail in nearby objects only about three times as long an exposure need be given through the Kodak Color Filter as should be given without the filter.



AT THE CASEMENT WINDOW
Made with a No. 3 Kodak, by John N. Brewer

SERVICE DEPARTMENT TALKS

THE MANUAL

THE manual that accompanies every hand camera that is sold by the Canadian Kodak Company explains, in detail, how to use the particular size and model of camera to which it applies.

A Brownie differs from a Kodak, and different models of the same size of the same kind of camera are somewhat different.

No matter how many cameras you have used, be sure to read the manual that applies to any other camera you may obtain, for by so doing you will learn, in a few minutes, what you might otherwise have to learn from experience.

We are daily answering questions regarding camera manipulation. We are very glad to answer these questions, but our readers would save time, and be able to improve opportunities that may come but once for securing certain pictures, if they would refer to the manual in which these questions are fully answered.

Always preserve the manual and read it frequently.

Should you encounter any problems that you cannot readily solve, in your photographic work, refer them to us. We shall be glad to assist you. There will be no charge.



Address all communications

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

No. 1 Pocket Kodak

Series II

Quick Action—When you release the catch and pull down the bed the lens of this new Kodak automatically springs into focus, ready for the picture.

Pocket Compactness—Put it in your pocket with space to spare.



KODAK Ball Bearing Shutter, simple to work and dependable, with snapshot speeds of $\frac{1}{25}$, $\frac{1}{50}$ and $\frac{1}{100}$ second and time and bulb actions, and an Eastman-tested lens mean good pictures.

This Kodak offers a lot for a little—

\$13.50

Pictures $2\frac{1}{4}$ x $3\frac{1}{4}$ inches

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

Slips over your camera lens



Kodak Diffusion Portrait Attachment

WITHOUT causing change from the customary manner of exposing, this new supplementary lens serves two purposes at once.

It fits your hand camera for close-up portraits and at the same time yields an effect soft, warm, diffused—and artistically appealing.

For example, harsh character lines are softened and glaring highlights reduced in a manner strikingly pleasing.

Price, \$1.25 and \$1.50

According to size

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KODAK FILM TANK

THERE is fun in finishing your films and the Kodak Film Tank method, all done in daylight, provides a means of securing correct development that is simple and sure. It puts the amateur on par with the expert. The box does darkroom duty—and the experience is inside.

It's inexpensive amusement, too.

Kodak Film Tanks, \$3.00 up

CANADIAN KODAK CO., LIMITED

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All dealers'

Kodak Cut Film

STRIKINGLY superior to plates both from a point of convenience and results.

Convenience: Cut film compared to plates is unbreakable, lighter, more compact, easier to handle and more convenient to keep.

Results: Cut film has wide latitude for detail in shadows without risk of degrading highlights; fine grain that permits enlargements to almost any size; and it is strictly non-halation.

Regular Kodak Cut Film—equal in speed to fast plates.

Kodak Cut Film *Super Speed*—emphatically faster.

Kodak Cut Film Sheath

—adapts any plate holding camera for use with Kodak Cut Film, including the Nos. 3 and 3A Kodaks, both regular and *Special* models, when equipped with the Combination Back.

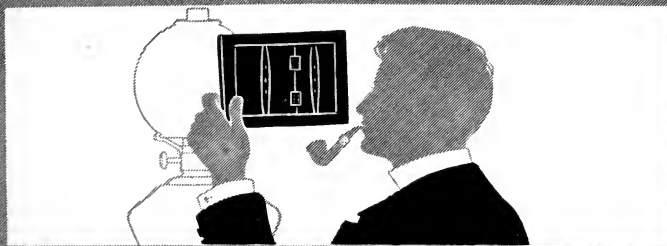
PRICES

	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, Doz.	\$0.45	\$0.65	\$0.90	\$0.90	\$1.45
Kodak Cut Film <i>Super Speed</i> , doz.50	.75	1.00	1.00	1.60
Kodak Cut Film Sheath, each12	.12	.18	.18	
Eastman Film Sheath No. 330

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Prints by Gaslight

The paper that makes the most of
every negative

VELOX

No. 1 for extremely contrasty negatives

(A new contrast)

No. 2 for average negatives

(Formerly "Special")

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(Formerly "Regular")

No. 4 for extremely flat, weak negatives

(Formerly "Contrast")

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

No. 2_C Autographic Kodak *Special*



The pictures, $2\frac{7}{8} \times 4\frac{7}{8}$, are large and splendidly proportioned, both for vertical and horizontal views.

STRIKING photographic proficiency is accorded this *Special* by its lens and shutter.

The speed of the lens, Kodak Anastigmat $f.6.3$, is an emphatic aid to pictures that are photographically difficult—slow snapshots in the shade, for example. This is a quality you want sometimes. The lens cuts sharp and gives you clean-cut negatives from which it is a pleasure to print. And this is a quality you want always.

Kodamatic shutter has seven speeds from $\frac{1}{2}$ to $\frac{1}{150}$ second with "bulb" and time actions—a comprehensive range that permits pictures in virtually the entire hand camera field.

ADDITIONAL FEATURES: Kodak Range Finder—for finding the correct focus. Autographic attachment—countersunk for convenience when writing a notation on the film. Body—aluminum for lightness and covered with genuine sealskin for looks.

Price, \$65.00

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

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KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



SEPTEMBER 1923



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



*The Optipod holds the camera; the
Tin.er trips the shutter*

Handy accessories that slip in your pocket and help you make pictures you'll be proud to show.

Optipod

SCREWS to any tripod socket and clamps to any edge—fender, windshield, stick, or table, for example—holding the camera for you. Felt pads prevent marring the most highly polished surface.

Price, \$1.50

Kodak Self Timer

TAKES the picture for you. Attach it to the cable release, set it, and you can be in the group. Adjustable to "click" the shutter at any interval between $\frac{1}{2}$ second and one minute.

Price, \$1.50

CANADIAN KODAK CO., LIMITED

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Use Kodak Cut Film

Because it has all the advantages of plates with none of their drawbacks.

Because its wide latitude enables you to get detail in the shadows without clogging the highlights.

Because its fine grain allows you to make enlargements to almost any size.

Because it is light, unbreakable and easy to handle.

Because it is strictly non-halation.

Regular Kodak Cut Film has the speed of fast plates, while Kodak Cut Film *Super Speed* is emphatically faster. Through the agency of Kodak Cut Film Sheaths, Kodak Cut Film, either regular or *Super Speed*, can be used in any plate holding camera including both regular and *Special* models of the Nos. 3 and 3A Kodaks when equipped with Combination Backs.

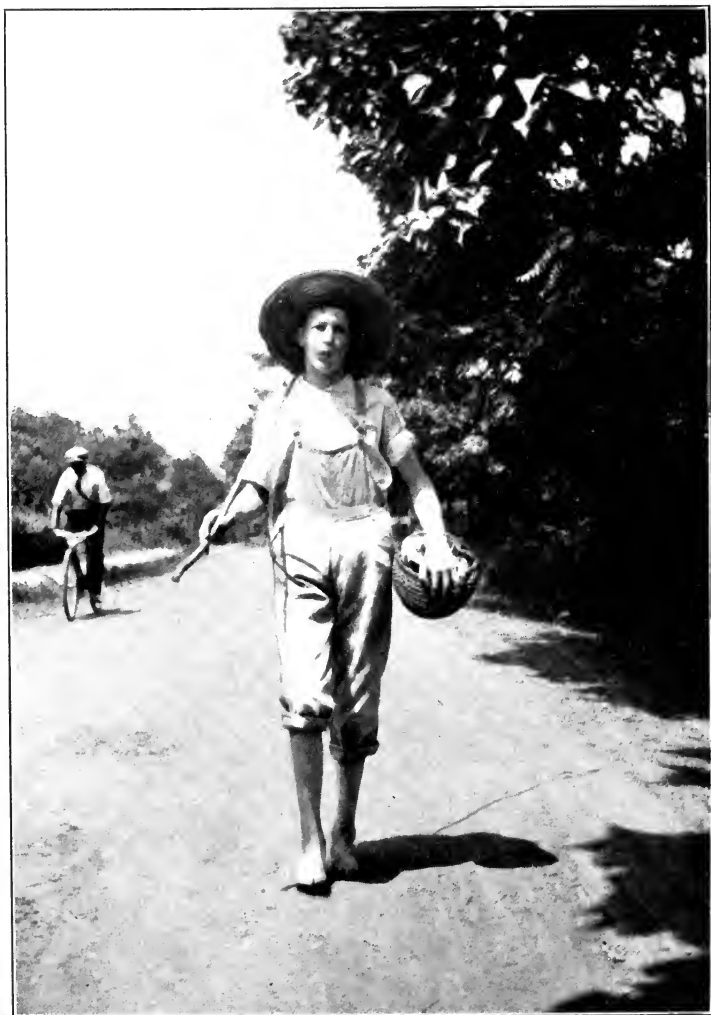
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Kodak Cut Film <i>Super Speed</i> , doz.50	.75	1.00	1.00	1.60
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Eastman Film Sheath No. 330

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

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CARE FREE

Made with a 2A Brownie, by Sarah H. Moss



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES 5 CENTS

VOL. X

SEPTEMBER, 1923

No. 11



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A TREK OVER THE ICE FLOES

IN THE ARCTIC ICE

BY GEORGE ALLAN ENGLAND

Illustrated with Pictures made by the Author, with a Brownie

IN the spring of 1922 I was commissioned by a New York publishing house to ship aboard a vessel of the Newfoundland sealing-fleet, for the purpose of getting literary material and photographs.

The seal hunt is carried on between Newfoundland and Greenland, in the heavy arctic pack-ice which is brought southward by the

Labrador current, and involves great perils and hardships. The matter of equipment was, therefore, highly important to me.

Many years of experience with various models of Kodaks, knocking all over the map, had convinced me that they were real, dependable cameras. With a small Kodak I had previously visited the



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READY FOR A DAY'S HUNTING

Caribbean and the Newfoundland coast, also the French colony of St. Pierre, Miquelon, and had obtained such satisfactory views that various publications had used them to illustrate my articles.

As this seal hunt was to be conducted where the camera must be manipulated with gloved hands, or with fingers that were numbed by the arctic cold, I wanted a fixed focus box camera which had a one speed shutter that was always set.

I knew that Eastman cameras could be depended on in tropical climates, but work in the ice-fields would be radically different. None the less I pinned my faith to the Brownie for this most important work, because it was an Eastman. The trip was to be costly in time, money and effort, and I simply had to get results. There could never be any chance to repeat the expedition. It was a unique occasion, and "now or never" I had to get the pictures.

Equipped with a 2C box Brownie I went aboard the sealing vessel—the historic old



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SKINNING THE SEALS



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SEAL SKINS ON DECK

Terra Nova, the same ship used by Scott and Shackleton in their famous expedition to the South Pole. For more than five weeks I was on board this sealer and the *Eagle*, to which I later transferred over the running ice, taking my Brownie with me.

My sealing pictures were taken under conditions of intense cold and hardships, in storms, fogs, blinding sunlight on ice, and while clambering about the ship, or doing gymnastic stunts out on the floating, grinding, "rafting" ice-floes. Many of them were of necessity the liveliest kind of snapshots, with no opportunity for care. It was just a case of "shoot quick!" The work was all rough-and-ready, surrounded by the most adverse possible conditions.

This sort of photography is essentially different from well order-



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A VESSEL OF THE SEALING FLEET



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GATHERING ICE FOR ICING DOWN THE SKINS

ed and deliberately calculated work in a safe environment.

I figured that if half of my exposures yielded satisfactory results,

under the hit-or-miss conditions, I should be very well pleased.

When I returned and developed my films, out of about two hundred exposures there were hardly ten "duds"; and these were due to my having moved the camera, or having made exposures too late in the evening.

I still have the same camera, and am planning to take it with me on my proposed trip to the Labrador and Hudson Bay trading posts, to get illustrations for articles for a book on the fur trade and the life of the Esquimaux. My little Brownie is as good as ever, despite all the abuse I have



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HOOKING A SEAL TO THE WIRE CABLE—
TO BE HAILED ABOARD

inflicted on it, and though battered and worn, it asks nothing better than to be my pal again, and to accompany me on the long trek once more into the great white spaces of the Northland.

EDITOR'S NOTE—Commander Peary used a Kodak in the Arctic, and Mr. Hurley, the official photographer of the Shackleton South Polar Expedition, used a Graflex in the Antarctic regions.

Mr. England is, probably, the first man who has relied solely on a simple little Brownie for such important work as he was called on to perform under the extremely difficult conditions that confronted him.

That his faith in Eastman-made cameras was not misplaced is shown by his pictures. The only serious camera handicap was that Brownie equipment could not provide a lens fast enough for securing fully timed snapshots during the long spring twilights of the



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GAFFING A YOUNG SEAL



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TWO "WHITE COATS," OR BABY SEALS,
BESIDE THEIR MOTHER

north, although, of course there are other definite limitations which are naturally imposed by a camera of the box type.

WRITE IT ON THE FILM AT THE TIME

ALL those who use an Autographic Kodak, Brownie or Graflex camera and write the title on the margin of each negative immediately after the exposure is made have a permanent and correct record, telling the "when" and "where." All guessing, later on, as to how old was Betty or just where and when that landscape picture was made is eliminated.

While you may not care to use the autographic feature for every exposure, it is of particular value for many subjects such as vacations, travel and children's pictures.



MRS. ROBIN

BIRD PHOTOGRAPHY BY FLASHLIGHT

BY HOWARD TAYLOR MIDDLETON

Illustrated by the Author

MANY a chance at an interesting portrait of a nesting bird is lost because of poor light conditions. Very often the sylvan home, so exquisitely wrought, that you are most eager to add to your wild life print collection, is situated in the very heart of the deep woods where sunshine is unknown, and where it is almost impossible to procure successful pictures at snapshot speed without the assistance of artificial illumination. Long time-exposures can

sometimes be made of a quietly brooding bird under such conditions, but there is always the great risk of the subject moving just enough to spoil the negative.

The way to get bird pictures amid the twilight gloom of a forest fastness is through the medium of flashlight photography.

For the beginner, I would suggest young birds as the most appropriate subjects upon which to make initial experiments in flashlight photography. Not being



A HUNGRY FAMILY

old enough to know the meaning of fear, they will not flinch at the flare that attends the firing of the flash.

Suppose we have found the grassy bowl dwelling of a cardinal grosbeak in a dusky thicket of flowering dogwood. The last of the

brood, a saucy little chap in coat and waistcoat of a reddish-pink, is about to join his brothers and sisters who have already started out to see the world. We are just in time for a picture.

Our camera is clamped to a pole in front of the nest by means of a



YOUNG YELLOW WARBLERS

Kodapod, carefully focused, and the shutter set for "time."

If a hand camera is used, a Portrait Attachment should be placed in front of the lens to insure a large image, the distance between Portrait Attachment and subject being exactly that stated on the instruction sheet that comes with the attachment.

Then the Flash Gun or Flash Pistol (there are several satisfactory types on the market) is clamped to a second pole beside the camera so that the pistol is slightly above and behind the lens.

One stout thread is attached to the finger release of the camera

shutter, and a cord to trigger of pistol, then we take our stand behind the outfit with eyes upon Master Cardinal. When that feathered young gentleman strikes and holds an attractive pose, we first pull the camera thread to open the shutter, and then pull the trigger thread to ignite the flash. As soon as the flash has been made we pull the camera thread again to close the shutter—and the picture is ours.

Sometimes the light, while not bright enough for daylight snapshot work even with the lens wide open, is nevertheless sufficiently strong to give an over-exposure if the shutter is left open too long before or after igniting. For this reason the flash should be ignited immediately after the shutter is opened and the shutter should be closed immediately after the flash has been made.

For a nesting series by flashlight, I can recommend Robin Redbreast as a bird likely to accommodate you.

I would not attempt any robin portraits by flashlight, however, until the young are hatched, as this bird is very much more ready to abandon her nest when alarmed, before than after that important event.

Do not become discouraged if the mother disappears with a wild flutter of wings when the first flash is made. She will soon be back again, and, after a little experience with the bright white light, will probably ignore it entirely.

Among the most common of our birds who have consented to "sit" for the writer's flashlight outfit, are



A YOUNG CATBIRD

the brown thrasher, catbird, chipping and song sparrows, orchard oriole, red-eyed vireo, wood thrush, and yellow warbler.

Two citizens of birdland who strenuously objected to being flashlited were the cardinal and the mourning dove.

Something of vital importance to be remembered *always* when working with a flashlight apparatus in the woods, or in any locality where there are dry leaves, dead grass, or any inflammable material whatsoever, is to use the utmost caution to see that no flaming particles thrown off from the firing pistol ignite the foliage. I know by experience that I would have been responsible for more than one forest fire, and, incident-

tally, the destruction of wild life as well, had I failed to strictly abide by this rule.

The same rule should apply to smokers. Never throw away a cigar or cigarette stub while afield without stamping it into the soil with your heel until the last spark is extinguished.



Never hold the camera in the hands when making a bulb or time exposure. If you do the picture will be blurred. Always place the camera on a tripod, or some other rigid support, when you make any exposure that is longer than $\frac{1}{25}$ of a second.



AN ASTONISHED ROBIN



THE HIGH BICYCLE WITH ITS KODAK ARMAMENT

Reproduced from an old print

CONQUERED NEW WORLDS WITH HIS KODAK

The picture above is of Mr. R. Lee Sharpe, Atlanta, Ga., U. S. A., one of the early Kodak enthusiasts who, by reason of his having one of those "Magic Boxes," became a sort of hero in his home town.

LET us quote however from Mr. Sharpe's interesting letter to us. He says:

"For a hundred years, if I live that long, my greatest thrill takes me back just thirty years ago—when father brought from the express office my first Kodak. The news soon spread all over the village, even down the yellow roads that softly curled and slept in the sun. Father was the editor of a

wheezy little country paper and many of his subscribers asked to see the 'Magic Box' that claimed to take anybody's picture.

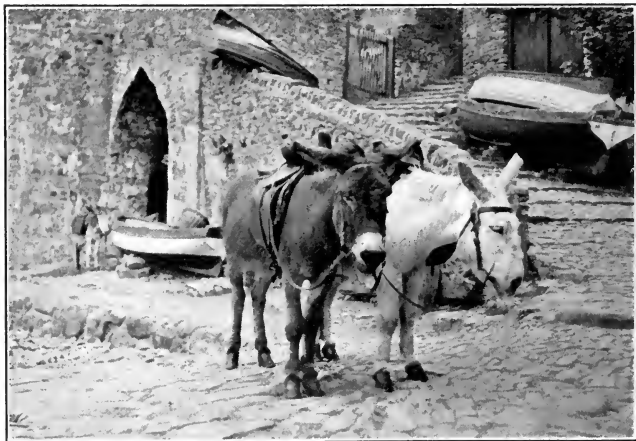
The village loafers and merchants touched it lightly as I explained to them about 'pressing the button' and that the Eastman Kodak Company of Rochester, New York, would 'do the rest.' Of course all were amazed when I explained that any one could take pictures with it and, of course, many had their doubts. I remember old Squire Hardson said I had been humbugged if it came from

New York, and he raised his cane in the air and declared to me, 'I'll eat all you ever take.'

I 'tuk' lots of pictures to the amazement of all—including myself, and if I had held the squire to his promise he would have had a bad case of indigestion—unless his stomach was constructed like that of a goat. My picture making was the talk of the village, and somehow my Kodak caused it to awake from its Rip Van Winkle sleep.

My next thrill was a high bicycle and with my 'Magic Box' strapped to it I rode forth as proudly as Sir Gallahad. My first trip was to Columbus, Ga., seventy miles. Since then I have made hundreds of pilgrimages and had enough adventures with my Kodak to fill many books, and from each

trip, unlike Sir Gallahad, I brought back many treasures. After each conquest the same thrill of happiness comes over me, as it did thirty years ago, when I opened up my first package of prints from Rochester, N. Y., in the Post Office, surrounded by my envious friends. I was the Burton Holmes of the village, and explained to all the minutest detail of every picture—where it was made, etc. As I pushed my way out of the crowd on my way home, I felt that a new world was mine and the older I get the more I realize that my Kodak has added years of happiness by bringing new worlds to me. Since those memorable days, I have owned many Kodaks and made thousands of pictures and some that money cannot buy."



CLOVELLY DONKEYS
Made with No. 3 Kodak

IT BLINDS THE LENS AND BLURS THE PICTURE

THE amateur who wishes to know why he is cautioned to see that the sun does not strike into the camera lens, when making exposures, need look only to his own eyes for an explanation. The functions of the human eye and of the camera's eye—its lens—are somewhat similar, and neither can do its work well with bright light shining directly into it.

When the direct rays of the sun strike the lens they spread a flood of light, conveying no image, over the entire picture area of the film. This interferes with the rays of light that carry the image of the subject to the film and thereby cuts down the contrast in the negative. The scene cannot register properly on the film any more than it can register properly on the retina of a light-blinded eye.

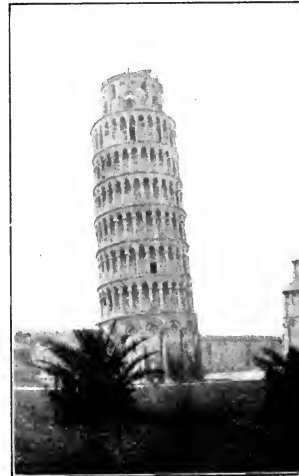
The most brilliant illumination is obtained when the sun shines over the camerist's back, directly towards the subject. In most cases, however, it is preferable to have the light come partly from the side because living subjects do not like to face directly into the sun and still subjects usually look best when their shadows are visible. Again, it is true that at times pleasing lighting effects can be obtained by picturing the shadow side of subjects that are brightly lighted but here is where extra care should be taken to see that direct rays of sunlight do not come into the lens. If this is not possible by making the picture from a point of view where the shadow of a tree or building falls across the lens hold a hat or some object in such a position that the lens will be shaded.



QUIET WATERS

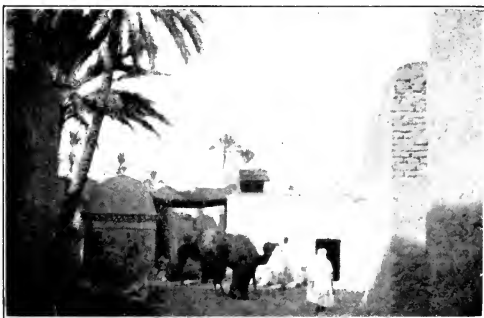
Made with a 3A Autographic Kodak

"THE WORLD IN FULL PRINTS AND "EXTRA" THE VES



VEST POCKET"

FROM NEGATIVES MADE WITH
KODAK





THE PUZZLE

JOE AND JERRY GET A PUZZLE PICTURE

WHILE the river that flowed through Joe's and Jerry's home town didn't look very large on the map, it was to them a glorious avenue of commerce and adventure. The sole evidence of commerce, however, was a small fleet of grain barges. And the only adventures were those invented by the boat crews for entertainment of youthful admirers.

'Twas down at the wharf that Joe and Jerry acquired some of their most valued possessions. By happening along one afternoon just as the skipper of a string of barges found his mascot in the midst of a linen lunch, the boys inherited a splendid goat. And once the fireman of a river tug asked them to dispose of a mysterious burlap bundle, which turned out to contain the cook's accordion.

Thus the river meant something

in the young lives of Joe and Jerry, even after the former's uncle had sent him a Brownie camera.

One day they heard the bellow of a strange whistle and off they ran to the river bank.

Coming into the bend was a big dredge, chains clanking, boom swinging like the head of some monster, engine puffing languidly as the huge hulk plodded up the stream. It was a new spectacle on the river.

"Got to get a picture of it," said Joe after a moment of open-mouthed bewilderment. Click! the Brownie quickly did its part.

"Should have taken a horizontal view," Jerry urged. "You could get closer then and the dredge would be bigger in the picture."

"Say, that's right," agreed Joe, "and we can do it yet."

They hurried ahead and made another exposure, with the camera

held horizontally, the subject about a hundred feet away.

"That one will be the real picture," Joe said, "Just wait till we get this roll printed."

And wait they did, although Mr. Sill, at the Kodak counter, thought at times that they'd never hold out until the promised hour.

"Come around at five o'clock," he advised. "It's only three now." Meanwhile he had one horrified look at the pictures before they were dry.

"Bad collision, wasn't it?" he asked when the boys showed up.

"What collision?"

"Over at the river when that big dredge jumped into the air and then dove down through itself again. Your print shows it fine."

By now Joe and Jerry were staring in astonishment at the puzzle picture which their dredge views had turned out to be.

"Whillikins, Joe, you forgot to turn the film," Jerry accused. "Bet I'd have done it right."

"Bet you'd have been just as excited," retorted Joe.

Then Mr. Sill interposed. "Anybody might make that mistake once, but once ought to be enough. Here's the way to avoid it. *Always wind the film immediately after each exposure.* Then it's sure to be done. It will be ready for the next picture, too, without delay, no matter how unexpectedly the subject happens to appear. Otherwise you won't remember whether a fresh section of film is in place, and you'll double up every once in a while."

"Wastes film," ventured Joe.

"Worse than that, it wastes pictures, two of them each time," Mr.

Sill added. "Now you haven't any view of the dredge at all."

"May never get another chance, either," lamented Jerry. "May never be another dredge along here."

But Joe said there would be if he ever made two exposures on the same film again—they'd need one to find his body.

—

*Brilliant Pictures can only be
made with Clean Lenses*



A BUDDING BOTANIST

*No. 2C Kodak Jr. Negative, by
E. T. Fulford; f.11, $\frac{1}{25}$ second, 11 A.M.*



WE FOUR

Made with a 3A Kodak, 5.30 P. M. in July; stop 8, $\frac{1}{8}$ Second exposure

THE TEA PARTY

BY MADGE ELLERY

THAT afternoon last week when Mary Ellen had the twins and Louise over was indeed a hot one, and the happy thought struck her of having a little tea party all of their own out on the lawn under the big tree.

A little table was procured, the cups and saucers, teapot and "goodies" were placed upon it and all was soon in readiness for the young hostess to serve.

"Now isn't that a picture," remarked grandmother, "why don't you snap them with your camera?"

"I'm afraid the light isn't bright enough," said I, "you see they are in the shade of the tree and then too it is after five o'clock."

"What was that I saw in the manual of directions, that came

with your camera, about making time exposures outdoors?" asked Dad.

I did have a faint recollection of seeing some information of the kind when I had first read over the manual. I had kept the little booklet, and sure enough it gave suggestions for making pictures under similar light conditions.

A short time exposure was all that was necessary. Placing my camera on its tripod, setting the distance pointer on the 15 foot mark, stopping the lens down to U. S. 8 and with the speed indicator, at the top of the shutter, on B, I pressed the cable release and let go of it as quickly as possible.

I had cautioned the girls to be quiet until after they heard the

click of the shutter. Mary Ellen stood at the corner of the table, teapot in hand as if starting to serve her guests and I suggested that Marjorie and Louise take hold of their cups while Hope watched the process of pouring the tea.

This seemed to give a natural and unposed attitude to everyone and the result was certainly gratifying as will be seen by the reproduction of the picture.

The light was soft and even on every face and I secured an ex-

cellent likeness of each girl. I'm going to make more pictures of the same kind in the shade.

Grandmother was delighted with the picture and suggested that I have an enlargement made for each of the girls, as a memento of the occasion.

Dad says it would be a good idea for me to read over that little manual more carefully and keep it in the carrying case right with the camera. Dad's suggestion is a good one.



MATES

Made with a No. 3 Kodak

TWO GLIMPSES OF FRANCE



STREET SCENE IN LA BOUILLE, NORMANDY

THE HARBOR, MENTONE
Made with a 3A Folding Kodak

TIMING FACTORS IN ENLARGING

SOME workers, when making enlargements, like to make their tests for correct timing by using a full sized sheet of bromide paper so that they may examine the entire picture. Others follow the method of taking a sheet of bromide paper out of every package they use and cutting it into test strips, one or two inches wide. These strips permit making a number of test exposures to determine the right length of time to print whatever size enlargements they want to make from their negatives. To make such tests one of the strips is placed diagonally across the focused image on the bromide paper easel, two thirds of the image is covered with a sheet of cardboard and an exposure is made. The cardboard is then moved so that only one-half of the part that was covered during the first exposure remains covered, and another exposure, of the same length as the first is made. For the final exposure, which is also of the same length, the entire strip is uncovered. If each exposure was 30 seconds, the first section of the strip will have received 90 seconds, the second section, 60 seconds and the third, or last, section 30 seconds exposure.

The entire strip is now developed for not less than a minute and a quarter, nor longer than a minute and a half, and unless all of the exposures were much too short or much too long, one of them will indicate the time necessary to get a correctly exposed enlargement from the negative being used. The advantage of this method is that the photographer can determine the right length of time to give without making the test exposures on as large a sheet of paper as would be needed for printing the entire picture.

Everyone who prefers, however, to make their tests on full sized sheets of paper can accurately and economically determine the right length of time for printing enlargements of $1\frac{1}{4}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, $2\frac{3}{4}$, 3, $3\frac{1}{4}$ and $3\frac{1}{2}$ diameters, with the Kodak Auto-Focus Enlarger, by first determining the right length of time for printing a $1\frac{1}{2}$ diameter enlargement, which can be made on a sheet of bromide paper that is only $1\frac{1}{2}$ times as large as is needed for making a contact print. This printing time is then multiplied by the factor given in the table below, for the diameter of enlargement that will give the size of picture that is wanted.

TIMING FACTORS FOR ENLARGING TO DIFFERENT DIAMETERS
WITH THE KODAK AUTO-FOCUS ENLARGER

Diameter of Enlargement	$1\frac{1}{2}$	$1\frac{3}{4}$	2	$2\frac{1}{4}$	$2\frac{1}{2}$	$2\frac{3}{4}$	3	$3\frac{1}{4}$	$3\frac{1}{2}$
Timing Factor	1	1.21	1.44	1.69	1.96	2.25	2.56	2.89	3.24

To illustrate: If the length of time it takes to correctly print a $1\frac{1}{2}$ diameter enlargement is 30 seconds, then, for a $2\frac{1}{2}$ diameter enlargement it will be $30 \times 1.96=58.8$ or 59 seconds, and for a $3\frac{1}{2}$ diameter enlargement it will be $30 \times 3.24=97.2$ or 97 seconds.



THE "COOKHOUSE CALL" ON A BRITISH SEA SCOUT SHIP
Made with a 3A Kodak Jr.



BENCH WARMERS

Made with No. 1 Kodak Special, by E. J. Brown

SUMMER IN THE CITY

BY ALBERT CRANE WALLACE

IT is, I know, the fashion to say rather abusive things about the city when comparing it with the country. I'm not going to talk back by saying mean things about the country. I'm not going to let any one ask me which I like the better, the city or the country. Nobody has to make such a decision. I don't like one better than the other. I like them both.

What I object to is the suggestion that the country has all the sky, or all the sunlight, or all the flowers, or all the fun.

In particular I want to protest against any notion that the city can't have a summertime and be glad of it.

Summertime in the city can be wonderful. Sometimes there isn't a breath of air—just as sometimes happens in the country. But there are a great many things to make you satisfied all the same.

And in particular (once more) I want to insist that the city in summer is a delightful scene for photographic adventure. When spattered with sunlight, it is, to begin with, full of picturesque vistas. Then its odd corners, its alleys, and arches, its window outlooks, its traffic, its multitudes of figures, all are material.

What shall we say of its roofs? Aren't "cityscapes" great for unexpected things? Is any forest



A SPEEDER

Enlarged from a Premo Negative, made by L. Zwarg

more romantic than a forest of chimneys, and flag poles, and radio wirings, and church spires? Is any cavern more thrilling than a cavern in the heart of a region of sky scrapers? Is any sea or lake more picturesque than a city pond surrounded by a bunch of boys sailing clothes pin boats?

And the parks—take them on a summer afternoon. O. Henry found a lot of his stories on park benches. William M. Chase and other great painters have found rare beauty in parks. There are a hundred sorts of activity in a park as well as a good many funny sorts of idleness!

I must not forget to mention the city in the rain. Naturally a light rain is more interesting to one with his Kodak than a darkly overcast rain. The great point is

the reflections on sidewalks and asphalt pavements. These glittering lines can be extremely fantastic as well as quietly beautiful. In the way of composition, reflections add something that is very important to a picture. This is quite as true of a city vista in the rain (or just after the rain ceases and the sun comes out) as of a lake shore.

Anyway, I find the city a pictorial wonderland, never twice the same, full of temptations to camera experiment. I find the city's children, whatever the weather, a lively help. There are so many *kinds* of children in the city! They find so many ways of being a joy as well as a nuisance!

So that when I can't get away to the country I'm not so very sorry for myself after all.



REFLECTIONS

Made with a No. 0 Graphic, by R. B. M. Taylor

SERVICE DEPARTMENT TALKS

DRYING FILMS IN HOT WEATHER

ALTHOUGH you may feel that the important part is over when your films have been developed, fixed and washed and are ready to hang up to dry, unless a few precautions are taken, at this stage when the film is still in a somewhat softened condition, your exposures may result in badly damaged negatives.

Whether you are camping or at home, a safe place should be selected for hanging the film to dry. This should be chosen with a view to protecting the wet surface from coming in contact with objects of any sort, no matter how small. The spot should be sheltered from wind as well as possible and should be free from dust. When the weather is sultry and there is but little air stirring, it is a good plan to hang the film in a doorway between rooms.

When a good place has been found, the film should be hung from a Kodak Film Clip or pinned at the top in at least two places in such a manner that it hangs straight down and clear of the support. Another film clip at the bottom holds the film taut and if doing the drying outdoors or where there is a slight breeze the strip can be kept from dangling about by fastening a string from the bottom clip to some object directly below.

Before hanging the film to dry it is well to drain all surplus water from the strip.

A film which has been allowed to dry at an even rate, will dry in better condition and more nearly flat than one which has been hurried by artificial means.

To sum up the matter of safely drying films a place should be selected which is free from dust, where there is a good circulation of air and where nothing will come in contact with the film.



For any information you may desire regarding
amateur photography address

SERVICE DEPARTMENT, CANADIAN KODAK Co., LIMITED
TORONTO, CANADA



Kodak Auto-Focus Enlarger

*For ease and speed
of operation it puts
enlarging on par
with contact print-
ing.*

BY eliminating focusing, this amateur apparatus takes the bother out of enlarging. Slide the camera up or down and the image size changes, but the focus stays sharp.

The ventilated lamp house has a capacity for Mazda lamps (not supplied) of from 75 to 200 watts so the printing speed can be adjusted to the individual amateur's preference.

Kodak Auto-Focus Enlarger accommodates either film or plate negatives up to 4 x 6 inches and makes prints on Bromide Paper up to 14 x 21 inches. Complete with Kodak Anastigmat Lens, negative holder, paper holder, set of flexible metal masks in six sizes, and electric cord and plug.

Kodak Auto-Focus Enlarger	\$40.00
Diffusing Disc for soft focus effects	1.00

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your Kodak dealer's

For soft-focus effects with your Kodak



Kodak Diffusion Portrait Attachment

THIS Kodak accessory equips the amateur for a new kind of picture.

For portraits in soft focus slip it over the regular lens, place the subject close up, and expose as usual. The resulting pictures will be warm, diffused—and different. Harsh lines in features are softened and glaring highlights reduced just the right amount to please.

Price, \$1.25 and \$1.50

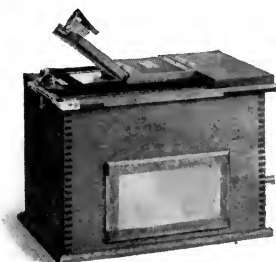
According to size

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

A handy printer for you



Kodak Amateur Printer

COMBINES in a self-contained outfit the essentials for printing at home.

Adjustable masking strips give the print seven white margins; spring clips hold the negative firmly for duplicates; the printing light turns on automatically as you press down the hinged top. To secure even illumination the light is arranged on an adjustable rod so it can always be centered under the negative, no matter its size. Negatives from $1\frac{5}{8} \times 2\frac{1}{2}$ to $4 \times 5\frac{1}{2}$ inches are accommodated.

A ruby light within the box burns continuously, providing safe illumination to work by, while an orange fabric panel in the side permits examining prints without danger of fogging.

Price, \$10.00

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

All dealers'

The developing outfit that packs a lot of ability into small compass—



Kodak Film Tank

WHEN you want to see results at once—in camp or cottage, for example—take along a Film Tank.

The Kodak Film Tank provides a method of daylight development that is simple as A. B. C., and sure as any method known, even to professionals. You don't need experience; you don't have to experiment. Just follow the instructions.

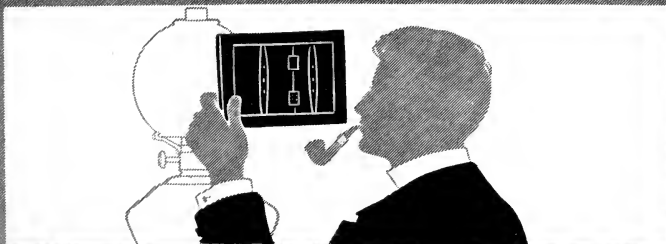
Price, \$3.00 up

According to size

CANADIAN KODAK CO., LIMITED

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Prints by Gaslight

“VELOX”

That's all you need tell your
finisher but the best prints
possible logically result.

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



Two new Kodak models

Distinctive features make these Pocket Kodaks, Series II, a group in themselves. Even their name is new. And their operation is strikingly different.

Nos. 1 and 1A Pocket Kodaks Series II

With Kodak Anastigmat Lens *f.7.7*.

To bring the camera into play simply pull down the camera bed and the lens automatically springs into picture-making position.

To focus, instead of the familiar distance scale, merely turn the lens rim and accurate

focus is thus secured from near view to infinity.

But even with such distinctive equipment the lens, Kodak Anastigmat *f.7.7*, at least halves the honors. Eastman-made from formula to finish, it cuts sharp and clean, clear to the film edge.

No. 1 for pictures $2\frac{1}{4} \times 3\frac{1}{4}$ —Price, \$20
No. 1A for pictures $2\frac{1}{2} \times 4\frac{1}{4}$ —Price, \$22

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

At your Kodak dealer's

KODAKERY

A
MAGAZINE *for* AMATEUR
PHOTOGRAPHERS



OCTOBER 1923



CANADIAN KODAK CO., LIMITED
TORONTO, CANADA



Kodak Albums

ASIDE from its constant utility—obviously worthwhile—for keeping prints clean and in order, your Kodak album will be precious later to recall old times.

A variety of styles—neat, attractive, durable.

Price, 20c. up

Eastman Film Negative Album



A CONVENIENT, practical storehouse for your films that keeps them safe from scratching. Consists of 100 transparent envelopes bound in stiff linen covers with a glove snap fastener. An index enables you to find any negative in a moment.

Price, for 100 negatives 2½x4¼ or smaller, \$1.25

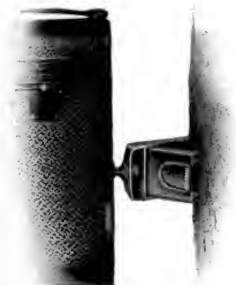
For 100 negatives 3¼x5½, 4x5 or smaller, \$1.50

CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

At your dealer's

*Two pocket-compact accessories
that do tripod duty—*

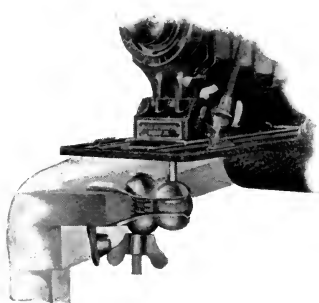


Kodapod

TAKES a vice-like grip on wood—fences, trees; posts and similar objects. A clamping screw permits adjusting the camera in the correct vertical or horizontal position. The toothed jaws are controlled by a stout spring. *Price, \$2.25.*

Optipod

CLAMPS to any edge—chair, table or automobile, for example. Used with a tripod its ball and socket joint permits tilting the camera to any angle—a distinct advantage for pictures at short range when it is impossible to place the tripod itself in the desired position. Felt pads prevent marring polished surfaces. *Price, \$1.50.*



CANADIAN KODAK CO., LIMITED

TORONTO, CANADA

All dealers'



CLOUDLAND AND TORRENT

Enlarged from a 1A Kodak Negative, made by C. B. Melchior



PUBLISHED MONTHLY—YEARLY SUBSCRIPTION, 60 CENTS; SINGLE COPIES, 5 CENTS

VOL. X

OCTOBER, 1923

No. 12



OFF TO SCHOOL
No. 3A Kodak Negative

THE SCHOOL BELL

Do you know that sound? There is no other quite like it, so that you are sure to recognize it when it cuts sharply into the crisp Fall air—the school bell!

There have been times when you were afraid to hear it, when if you heard it the summons would come from a distance, because you were late. There have been times

(unless you were a very unusual person) when you were a little tired of hearing it, because it was toward the end of the season and you were all set for vacation adventures.

But after vacation!—that is another matter. Then it sounds like the good old school bell. It even has a kind of adventurous novelty. You are to get back with the old

crowd and to meet all the new faces. There may be a new teacher.

You may be going to school for the first time and *everything* may be new. Nothing that ever happens to you afterward will have quite the thrill of that. You are going to school. You are now a *person* in the world.

In this case you will go forth with a certain importance of ceremony at home. After that you will often be inspired by receiving a special sort of good-bye. Even if you have become a seasoned schoolgoer you are pretty sure of particular attention at home on that first day of school after vacation. Big brother or big sister may be on hand with a Kodak (or maybe it might be Father—I can testify that it might be Father) to make historic record of the event.

It really *is* an event. The older I grow, and the more I study my own Kodak prints, the more clearly I understand that the important events of life are not by any means always the sort that seem momentous at the time. Simple moments are often wonderfully significant as we look back upon them. Of course, it is often the other way around—things that seemed important at the time of their happening have turned out to be less than we thought. But, in any case, we get the “slant” afterward and are frequently impressed in an almost startling way—yes, even by things as simple as that day we went back to school. Or, if we are mother or father, that day we saw

the children start off light-heartedly.

And we turn to the date on the film, perhaps to settle an argument as to which year it was, or which day in that year.

It was a great year, whichever it was, a year from which happy moments shine out. Nothing like Kodak pictures to remind you of happy moments. Generally you may not need to be reminded. There is a pleasant trick about memory that it shows the happy moments very sharply and the unpleasant moments blurred a good deal. But the Kodak pictures are a help when we may be feeling not quite so well, perhaps, and we are proportionately grateful. Pictures are the best of all possible helps to memory. They give the details, exactly and vividly. They make moments live again. They take mere guesses and make them facts. They do even more than that. They give us back the past—the past of a few months ago or of years ago, so that we get a sort of special interest on the investment of living.

Does this sound like “high brow” philosophy? Well, Kodak pictures get me going. After all, they are about life, and life is so tremendously interesting!

And you see, I was born before there were any Kodaks, and I’ve been wishing I had a picture of my funny self on the day I first went to school in that little red brick school house with my lunch in a queer tin pail. I have the memory, and it is fearfully dramatic. But I’d like to have the picture.



AT THE THRESHOLD OF LIFE

*Negative made with Graflex equipped with Kodak Anastigmat Lens
By Austin K. Hanks*

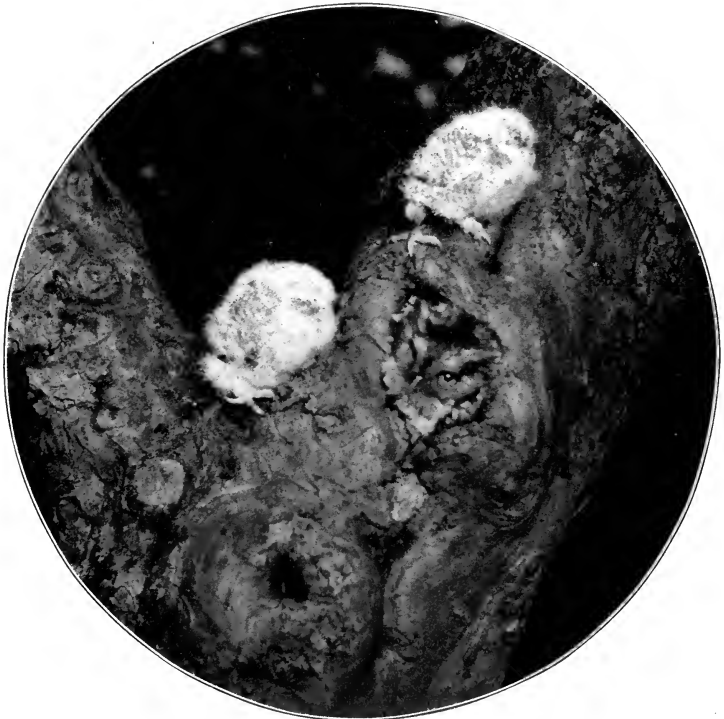


FIGURE ONE

A SCREECH OWL NURSERY
BY HOWARD TAYLOR MIDDLETON
Illustrated by the Author

FOR several years Screecher and his spouse have nested regularly in the same old gnarled apple tree in the orchard, but it was not until this season that the writer was fortunate in timing his arrival correctly from the standpoint of juvenile portraiture.

What I was most anxious to procure was a series of pictures de-

picting, to an interesting degree, the evolution of the young owls from white downy balls to fully feathered birds.

Walt and I began operations upon a delightful morning in late summer. Arriving at the hollow tree containing Mrs. Screecher and her family, a hand was thrust cautiously down the hole, and five



FIGURE TWO

fluffy babies withdrawn, much to their mother's disapproval, for she fought fiercely with beak and claws to protect her offsprings from the seemingly ravaging camera men.

As soon as all the young birds were taken from the cavity, the opening was covered with a focusing cloth to prevent the escape of the mother, and the two largest and strongest of the fledglings posed beside the front doorway of their apple tree home. Then the camera was set up and focused upon the scene, and as the tree was in deep shadow, a flashlight portrait was decided upon. Accordingly the shutter was set for "time,"

and the lens stopped down to 16 to insure sufficient depth of focus. Next, a Flash Pistol was held in the hand slightly behind and above the lens, and the cloth removed from the hole.

It was but a moment ere the horned head of Mother Owl filled the aperture, and immediately following her appearance, the shutter was opened, flash fired, and shutter closed, the three operations being performed with all possible speed (Fig. 1). Then the cloth was once again draped across the hole; we were not yet through with Mother Owl, you see.

Experiments very soon brought to light the fact that only three of

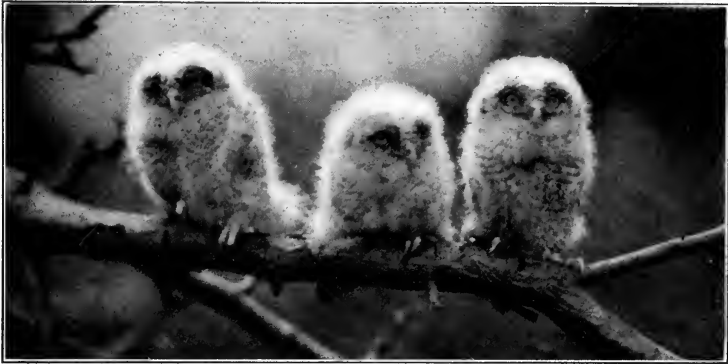


FIGURE THREE

the babies were lusty enough as yet to stand the strain of posing successfully before the camera, so we decided to try for a family portrait comprising Mother and a trio of her fuzzy infants. Therefore, after three of the children had been placed in a row upon an apple bough, the old bird was captured and placed near them. While it took a great deal of time and patience to induce the feathered lady to "register" the proper pose and expression, eventually she settled down sufficiently to permit of restraining hands being removed, and a portrait taken, before she darted away on silent wings through the green tree tops. (Fig. 2, $\frac{1}{100}$ second at *f.8*, Kodak Cut Film, Super Speed.)

Being deeply in love with a certain type of studio portrait now much in vogue, viz: that embodying the artistic lighting effect which outlines the head of the subject with a shimmering halo, we made a close up Graflex portrait of the young owls, taking them

against the light to produce the result desired. (Fig. 3, $\frac{1}{40}$ second at *f.5.6*.)

Four days later found the young owls quite noticeably advanced toward maturity, and improvising a front verandah for the owl domicile from an overhanging branch we took our second flashlight portrait. (Fig. 4.)

Another four days sped by, and again we called at the screech owl nursery. The downy balls had now been transformed into feathered crested birds of prey—evolution had almost run its course. In a very little while these babies would be babies no more, but winged hunters of the night, pouncing upon mice and insects with all the skill and cunning of their experienced parents, and, realizing these things, we hastened to make our final record of the owlets. (Fig. 5, $\frac{1}{40}$ second at *f.8*.)

During the times we had been working with our cameras in the orchard, we kept our eyes wide open for the day-abiding place of



FIGURE FOUR

the Lord of the owl household, and made mental note of several likely spots where he might be found snoozing the *sunny* hours away.

We knew he would remain very near his wife and children, he being

a bird of unquestionable reputation in so far as his domestic relations are concerned. Mr. Screech Owl is far more careful in this particular than many humans, for he invariably mates for life, and divorce is



FIGURE FIVE



FIGURE SIX

unknown in the best owl circles.

Now that our evolution series had been brought to a successful close, during the portrayal of which, Mother Owl honored us with her presence, we combed the orchard for the male of the species to make our set of pictures quite complete—and in a hollow limb at a height of ten feet, we found him.

He was far too sleepy to offer serious resistance, and we had little trouble in persuading him to perch beside his bed chamber window while the Graflex took generous toll of his charms. (Fig. 6, $\frac{1}{25}$ second at $f.5.6$, sun behind a cloud bank.) We thanked him and hurried home to develop our films.

TWO
EXAMPLES OF
WORK
WITH THE
FOCUSING
POCKET KODAK
NO. 1A
SERIES II



THE
SIZE OF THE
NEGATIVE
MADE BY
THIS
NEW KODAK
IS $2\frac{1}{2} \times 4\frac{1}{4}$
INCHES





A DAINTY MISS

From a Graflex Negative, by Frank Reeves



"THE OLE SWIMMIN' HOLE"

Negative by W. L. Thompson

BACK TO BOYHOOD

MR. CASPER, having lunged against a lawn mower for some thirty minutes, felt himself justly entitled to the porch swing and, finding no one to dispute the decision, immediately put it into effect.

My, it was hot. Mr. Casper's collar had long since trickled down his neck and the big beads of perspiration on his brow seemed only stimulated by the onslaught of the handkerchief.

"Wouldn't a swim in Indian Dip go big to-day?" he thought reminiscently. "The Athletic Club is all right in its way but give me moss instead of marble,

woods instead of walls—and, yes sir, I'd rather have rain than showers. Believe me, we youngsters used to have fun in those days. Yes sir."

Mr. Casper beamed and lit his pipe.

"Great fun we used to have. Red Wilkins and Pete Dorrit and Lave Murdock and Bill Hendrick and Skeeter Wills—some crowd. I haven't thought of Skeeter Wills for years and yet he and I were thick as two thieves.

"Wonder what Indian Dip looks like now? Wonder what the old gang looks like now—and I wonder what they looked like then?"

Memory can't carry you back thirty years. Supposing I'd had a Kodak along the day Red Wilkins got stung over the eye with a hornet or the time we hid Bill Hendrick's clothes in the top of a pine tree—those pictures would be priceless to me now. I'd like snapshots of the old school, too, and the shanty we built by the marshes, and the 'haunted house' the very thought of which sent cold shivers down my youthful spine—even on a day like this. But, best of all, I'd like pictures made of the bunch at Indian Dip. Somehow most of the good times that I remember—

"Hello, dad," Donald Casper, aged 12, slid over the porch rail.

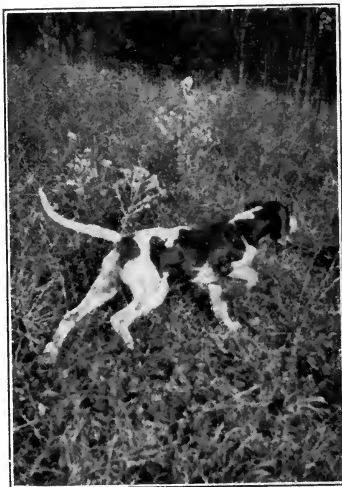
"Hello, son. Where you been?"

"Swimming with the gang up on Cooper's Creek. Had a lot of fun. Pete Duncan was along, and Ed White. Say, the moss felt good under your feet. Red Downer fell in with his clothes on—wish I'd had a camera."

"Son," began Mr. Casper impressively, "some day you'll be forty-five and something about the blue sky or the white heat will send your thoughts scurrying back to boyhood just as mine did today. It may surprise you to know, Donald, that I was once a boy myself and that no longer than fifteen minutes ago I was swimming in Indian Dip."

"You look sort of wet," agreed Donald.

"Yes sir," resumed Mr. Casper, "I was back there in a sense but the swimming hole and the bunch and the old landmarks were pretty hazy. I wish I'd had a camera along in those days, too, my boy.



POINTING

No. 1 Kodak, Jr. Negative, by Richard King, Stop 1, $\frac{1}{25}$

And that's the reason—" Here Mr. Casper's hand investigated his bill fold. "That's the reason that this bill and I are going to part company and you and a Brownie are going to begin business."

"Yes sir," ruminated Mr. Casper as Donald scuttled back over the rail again on his way to the camera store, "yes sir, I'd give a thousand dollars for pictures made when I was a boy."

And then as an idea suddenly occurred to him, he rushed to the porch railing. "Say, Donald."

Donald in the act of mounting his bicycle, brought his ears to attention. "Anyone who is strong enough to swim a stroke is man enough to mow the lawn. From now on it's your job."

WHEN TO HALVE THE EXPOSURE

ONLY half the exposure that is needed for ordinary nearby landscapes with prominent objects in the foreground, should be given when making pictures of extremely distant views, when the sun is shining brightly and the atmosphere clear. This also applies to subjects such as boats that are 200 feet or farther away on broad expanses of water and sandy beaches with no trees or shrubbery or other dark colored objects in the foreground.

With a box camera having but one shutter speed and single lens make a snapshot using the second stop rather than the first or largest, which stop is generally used for snapshot work.

When using a single lens folding camera set the shutter speed indicator on $\frac{1}{25}$ and use stop 2. A $\frac{1}{25}$ second exposure, with stop 32 (*f.22*) is ample with cameras having rapid rectilinear or anastigmat lens equipment.

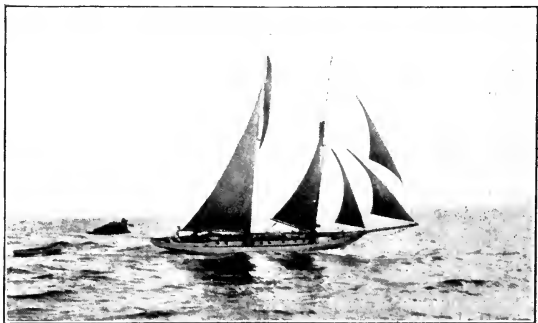
Think first and then make the exposure.



WHERE THE RAPIDS START
No. 3 Kodak Negative

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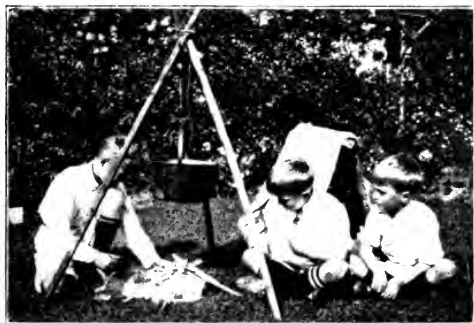




FIG. 1—*Too Heavily Shaded for a Snapshot exposure.* $\frac{1}{25}$ second, $f.16$

CONSIDER THE SHADOWS

Ir is the business of photography to reproduce objects in their relative degrees of brightness.

The artists refer to these different degrees of brightness as "tones" and these tones may vary from white to black, depending on the nature of the subject.

Since the more nearly we can reproduce in our picture the range of brightness which was present when the picture was taken, the better the picture will represent the original scene, our object in photography must be to get an accurate reproduction of the various tones which occur.

There would be no pictures if there were no contrasts at all and where dark tones and shadows predominate in the view they must be taken into consideration when determining the exposure to give.

Our illustrations Figs. 1 to 4

show types of scenes where shadows make up a large part of the view and such subjects make pleasing pictures if we get properly timed negatives. Figs. 1 and 3 show what is obtained by making an exposure such as would produce a good negative of an open view, unobstructed by foliage and with bright sunshine.

While it is true that we can make snapshots on cloudy-bright days of light toned objects under an open sky and get plenty of detail in the pictures, we cannot make snapshots that will show any objects that are in very deep shade even on the brightest of sunny days.

Objects that are out in the open are illuminated by the light that comes at all angles, directly from the sky while a scene partially enclosed and shaded by trees and



FIG. 2—Reproduced from a Correctly Exposed Negative. 1 second, *f*.16

foliage receives so little light directly from the sky that most parts are illuminated chiefly by light that is diffused and reflected from the surroundings.

There may be bright little patches of sunlight spotting the view and in some instances the general illumination may seem quite good but we must consider the shadow parts of the scene and expose for these rather than the scattered highlights if we would get a good picture.

The lighting of the view shown in Figs. 1 and 2 was quite contrasty, the patches of sunlight being very bright in comparison to the dimly-lighted surroundings. The sun was coming from the left and a trifle to the rear of the subject. The attempt to photograph this subject with an ordinary snapshot exposure $\frac{1}{25}$ second at stop 16 resulted in failure as shown in

the reproduction, Fig. 1. Next we set our Kodak on a tripod, which position you will note was a little higher than when holding in the hands, and gave an exposure of 1 second at the same stop opening. The result was a fully timed negative and the picture as reproduced in Fig. 2 shows the scene in the relative contrasts that we saw with the eye. The foregoing applies also to street scenes where the streets are lined with large shade trees and placed in such proximity that but little direct sunlight gets through. Fig. 3 shows what we got from the negative made at $\frac{1}{50}$ second, stop 16 and Fig. 4 the vastly different and pleasing result from giving a $\frac{1}{2}$ second exposure at the same stop opening.

In considering exposure we must remember that we photograph objects by the light that they reflect.



FIG. 3—*Under-Exposure Resulted from a Snapshot. $\frac{1}{50}$ second, f.16*

In the street scenes there was a large expanse of grey asphalt and light colored houses to aid in illuminating by reflection so that the exposure required to produce a good negative was not nearly as

much as was needed for the view in the woods.

Neither of the subjects referred to however could be classed as very densely shaded views as dense shade cannot exist where there is



FIG. 4 *With Sufficient Exposure This Was Obtained. $\frac{1}{2}$ second, f.16*

an abundance of top and side light penetrating even if most of it is diffused. When there is much doubt as to what exposure to give under such conditions it has been found a good method to stand in the midst of the scene and observe whether much or little sky is visible from that position. If comparatively little sky can be seen in any direction but detail can be discerned in dark tree trunks that are from 10 to 20 feet distant, an exposure of 3 seconds with stop 16 is usually sufficient. If stop 64 is used in order to get maximum depth of focus the exposure must

be four times as long as with stop 16. If no detail whatever can be seen in the dark tree trunks the exposure should not be less than 10 seconds with stop 16 or 40 seconds with stop 64.

If little sky is visible overhead but considerable can be seen across the landscape only one-half or one-quarter as long an exposure is needed as when but little sky can be seen in any direction.

The old axiom "expose for the shadows and let the highlights take care of themselves" always holds good in picturing scenes such as those we have been discussing.



HEADING SHOREWARD

Graflex Negative, by E. J. Schaefer

WHEN JOE AND JERRY HURRIED

IF Joe and Jerry had changed their names to Slow and Easy, nobody in the neighborhood would have been fooled. Their habits were too well known. Like other boys they took the most pleasure in taking their time.

Joe, for example, could never get excited over his mother's urgent demand for a loaf of bread or a scuttle of coal. Nor was Jerry the kind to go dashing off at the first stroke of the bell, unless it happened to be a fire alarm.

It just seemed that none of the boys' favorite pursuits called for speed. A few summers ago they had spent most of their waking hours with the goat, and a well-mannered goat neither learns nor teaches haste. Later they acquired an accordion, an instrument whose musical output isn't improved by fast production.

Then came a Brownie Camera, a gift to Joe from his uncle Ed. And the Brownie, of all boyhood companions, is certainly conducive to calm.

But on one eventful morning Joe and Jerry hurried. It was the day that Danver's Dog and Pony Show came to town. Over to the station early, to see the three special cars unload. Home to Jerry's house for a swallow of breakfast. Back to town to see the mammoth, gigantic street parade and free exhibition.

Standing in the window of Joe's father's office, the boys got a splendid view of the parade. Gaily harnessed horses, the blaring band, a clown and a mule, a string of

Shetland ponies and a wagon load of dogs—even such a little circus can be a big occasion.

There was a glorious chance for pictures. In the midst of all the excitement Joe hurriedly brought the Brownie into action twice from his look-out post in the window.

But oh, what disappointment overtook the boys on the following afternoon when they called for their prints. Genuine distress glistened in the eyes of Mr. Sims as he broke the news. "Two of your exposures were blanks. How do you suppose that happened? Did you turn the film past two numbers?"

Joe was sure he hadn't done that and Jerry joined him in wondering why it had to be that particular pair, the parade pictures, which failed to register.

"There's only one other possibility, then," said Mr. Sims, taking a Brownie from the show case. "Perhaps you didn't move the exposure lever far enough to open the shutter."

"I did just the same as always, I thought," Joe explained.

"Well you might have been



FIG. 1

excited and in too much of a hurry. Now I'll show you just what I think happened. You see the shutter doesn't open until the lever has reached almost the end of the slot. If you move it only two-thirds of the way (Fig. 1) the light never passes through the lens so the scene can't be recorded and that section of the film stays blank. That accounts for the first missing exposure.

"Then after turning a new section of film into place you pressed the lever in the other direction for another picture. (Fig. 2.) But of course the shutter didn't open because it hadn't tripped before. So nothing was recorded. In addi-



FIG. 2

tion to making an exposure a complete stroke of the lever sets the shutter for the next picture. If the stroke is incomplete the shutter doesn't reset. Just remember to press the lever the whole distance (Fig. 3) each time and you'll never draw a blank again."

"I should say we won't," agreed Joe, now that he understood the trouble and saw how easy it was to avoid.

"That's what comes from hurrying," said Jerry, then half an hour



FIG. 3

overdue with the groceries. "A fellow ought to take his time about everything he does."



THE TEMPERATURE

ALWAYS test the temperature of the developer with a thermometer. If you use a tank be sure to develop negatives for the length of time that the tank instructions recommend for the temperature recorded. Negatives can be correctly developed in an Eastman tank at any temperature between 45 and 70 degrees. A tray developer should be between 60 and 70 degrees.

CLEAN FERROTYPES TINS

The ferrotype tins that are used for furnishing glossy Velox prints should be cleaned occasionally with scalding water in order to remove any particles of gelatine which may remain on them from former prints.



SUNSHINE
No. 3 Kodak Negative

DO YOU KNOW THAT—

A well placed tree improves a landscape, but a tree rising from the head of a pretty girl does not improve a picture?

It is best when in doubt to turn the film to the next number because it is better to have one blank than one double, which means losing two pictures?

It is well to err on the side of giving a little too much rather than not enough exposure?

The side of a clapboard house does not make a pleasing background for a portrait.

Negatives that make good contact prints will usually make good enlargements?

The picture, especially a view, can often be improved by a liberal trimming of the print?

Films are affected by moist heat and, therefore, should be developed as soon as possible after exposure, especially when the weather is sultry?

With a Kodapod you can fasten your camera securely to a fence, branch of a tree, a stick in the ground or any other available support when out on a hike?

An anastigmat lens does not require any more accurate focusing than any other lens when used at the same stop?

The milky appearance of a freshly made acid hypo bath is the

result of putting in the acidifier before the hypo is completely dissolved?

Halftones are all gradations between highlights and deepest shadows in a picture?

Kodak Cut Film may be used with any camera accommodating standard sized plates not larger than 5 x 7 inches?

It is a good idea to get those vacation pictures in an album before some are mislaid or lost?



A REMINDER OF COOLER DAYS
No. 2A Brownie Negative



LOW TIDE

No. 3A Kodak Special Negative. $\frac{1}{10}$ second, *f.32*

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SERVICE DEPARTMENT TALKS

THE FINGER IN FRONT OF THE LENS

WHEN making snapshots by pressing the shutter lever, with the camera held in the hands, the fingers should be underneath the camera so that the lever will be pressed with the thumb.

The objection to supporting the camera with three fingers only is, that this method leaves one finger (usually the forefinger) free, and having no work to do, it sometimes gets in front of the lens.

When a finger, or anything else, is in front of and close to the lens it prevents the lens from seeing some part of the subject, with the result that that part of the subject will be represented by a black patch, instead of by an image, in the picture.



*For any information you may desire regarding
amateur photography address*

SERVICE DEPARTMENT, CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

Available for your plate holding camera, two speeds of

Kodak Cut Film

DECIDEDLY lighter and easier to handle than plates, Kodak Cut Film has all their advantages with none of their drawbacks. It has wide latitude to compensate for errors in under and over exposure, fine grain for enlarging, and is strictly non-halation.

Regular Kodak Cut Film has average plate emulsion speed, but to meet the difficult photographic situation—pictures in the late afternoon and snapshots in the shade, for example—use Kodak Cut Film *Super Speed*. Emphatically faster than plates, it often means results where pictures have hitherto been considered impossible.

Through the agency of Kodak Cut Film Sheaths, Kodak Cut Film, either regular or *Super Speed*, can be used in any plate holding camera including both regular and *Special* models of the Nos. 3 and 3A Kodaks when equipped with Combination Backs.

PRICES

	2¼ x 3¼	3¼ x 4¼	3¼ x 5½	4 x 5	5 x 7
Kodak Cut Film, doz.	\$0.45	\$0.65	\$0.90	\$0.90	\$1.45
Kodak Cut Film <i>Super Speed</i> , doz.50	.75	1.00	1.00	1.60
Kodak Cut Film Sheath, each12	.12	.18	.18	
Eastman Film Sheath No. 3, each30

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TORONTO, CANADA

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For soft-focus portraits



Kodak Diffusion Portrait Attachment

SIMPLY slip the attachment over the regular lens, place the subject close-up, and expose as usual.

The Kodak Diffusion Portrait Attachment yields results that are photographically faithful to the subject—even to delicate detail—but unpleasant sharpness of line and glare of highlight are eliminated. Results are soft, rich—and artistically pleasing.

Price, \$1.25 and \$1.50

According to size

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*Tinting prints as nature colored the scene is
easy—and interesting—with the*



Velox Transparent Water Color Stamp Outfit

JUST add water to Velox stamps and you are ready to tint. As the colors are self-blending no special artistic ability is required.

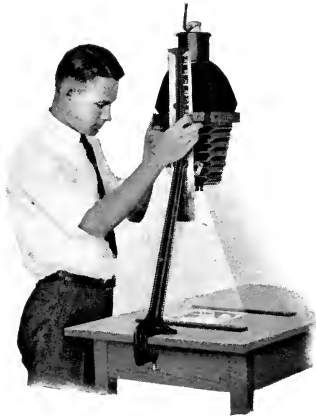
Velox Water Colors are permanently brilliant and afford ample color without covering up photographic detail.

The outfit, neatly packed in a convenient card-board case, includes mixing palette, three brushes and Velox Transparent Water Color Stamp book with twelve sheets of colors, each scored into twenty-six stamps. *Price, complete, \$1.20.*

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TORONTO, CANADA

At Kodak dealers'



Kodak Auto-Focus Enlarger

*Makes bromide
enlarging as easy as
contact printing*

Eliminates Focusing: To change the enlargement size, slide the camera up or down and as you do so, automatic mechanism constantly keeps the Kodak Anastigmat lens in correct focus.

Offers Complete Convenience: Clamp it to shelf or table top and you're ready to enlarge—no adjustments to make.

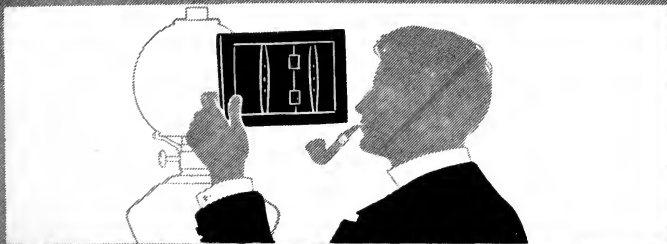
Kodak Auto-Focus Enlarger accommodates either film or plate negatives up to 4 x 6 inches and makes prints up to 14 x 21 inches, that is, from 1½ to 3½ times the dimensions of the negative. Furnished complete with Kodak Anastigmat Lens, negative holder, paper holder, set of flexible metal masks in six sizes, and electric cord and plug. The ventilated lamp house has a capacity for Mazda lamps (not supplied) of from 75 to 200 watts.

Kodak Auto-Focus Enlarger \$40.00
Diffusing Disc for soft focus effects 1.00

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Prints by Gaslight

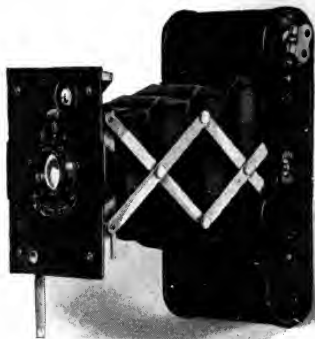
“VELOX”

That's all you need tell your
finisher but the best prints
possible logically result.

CANADIAN KODAK CO., LIMITED
TORONTO, CANADA

Focuses in a jiffy

Vest
Pocket
Autographic
Kodak
Special



KODAK Anastigmat Lens $f.6.9$, set in a focusing mount, gives this camera unique distinction. Simply give the mount a turn and you put the lens in focus through a distance range that starts at three feet, which means close-ups (head and shoulder portraits, for example) without the aid of supplementary lens equipment. This same lens assures negatives critically sharp, sparkling.

And all this optical excellence, remember, is in a camera so small that you can wear it.

Pictures $1\frac{5}{8} \times 2\frac{1}{2}$ inches.

At your dealer's

Price, \$18.00

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TORONTO, CANADA

If it isn't an Eastman, it isn't a Kodak



